CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 31st DECEMBER, 1959

DURBAN CORPORATION

C I T Y O F D U R B A N

A N N U A L R E P O R T

OF

C I T Y M E D I C A L O F F I C E R

OF

H E A L T H

* * *

YEAR ENDING 31ST DECEMBER 1959

City Health Department,

640 Smith Street,

DURBAN

26th September, 1960.

To His Worship the Mayor and Councillors
of the City of Durban.

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present the fifty-seventh Annual Report on the health and sanitary circumstances of the City, and the activities of the City Health Department, for the year ended 31st December, 1959.

It is pleasing to be able to record that there has been no major outbreak of infectious disease, nor any emergency of a public health nature. Rather, the Department has been confronted with a series of persistent health problems.

Typhoid Fever:

The high incidence of 303 cases, although representing a decrease in the figure of the early 1940's, confirmed an unsatisfactory rising trend over the past three years. By far the greater number of cases were reported from Cato Manor. The factors influencing the course of this endemic state of the disease, and the control measures instituted are described in some detail on pages 14-20 of the Report. It is interesting to note that the fatality rate from typhoid infection has decreased considerably in the last decade, co-incident with the application of modern drugs in treatment.

Diphtheria:

The figures show a drop of 56 notifications on the previous year's 171. 115 cases of diphtheria in a City the size of Durban is in keeping with the general trend in the Union as a whole, whereas up to 1950 Durban represented a focus of diphtheritic infection well in excess of the nation's level. To that extent the disease has been brought under control. Nevertheless it still occurs with a frequency unknown for years in the United Kingdom and other countries, and unlike typhoid fever its case fatality rate is rising. Obviously a new phase in its control is called for, and this will centre round more intensive immunisation of the population. The means for protection are at hand; the problem lies in educating the public to their acceptance.

Poliomyelitis:

The occurrence of 51 cases demonstrated that the virus was still prevalent in the Community. Cases were reported at a steady level throughout the year, the numbers never reaching the level of an epidemic. Vaccination proceeded apace and by the end of the year some 60,000 persons had received at least one injection against the disease. In spite of this, the course of the disease in the ensuing year is unpredictable. It may well be that there will be a rise in the number of cases in 1960.

Tuberculosis:

By the end of the year there were 8,166 known cases of tuberculosis in the City. The number of new cases showed a decline of 453 on the previous year's figures. This is not interpreted as a downward trend however, as certain factors influenced the case-finding programme during the year (Page 28 onwards). The death rates for the disease appear to have become stabilised over the past five years, under existing treatment facilities and therapeutic regimes. The number of reported cases represents an unknown ratio to the true number of cases.

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The Chest Clinic, where the total attendances exceeded 70,000, is working at its maximum capacity. No great impression will be made on the reservoir of infection in the City until case-finding facilities are extended. The need for additional peripheral clinics remains an urgent necessity.

The acceptance by the City Council of the principle of supplementary feeding, as an integral part of the control of the disease, was an important landmark in progress.

Venereal Diseases:

The incidence continues to decline slowly. As a result of an economy and efficiency survey by the Department the clinical services were re-organised on a more satisfactory basis.

Immunisation:

The year was marked by the introduction of combined diphtheria-tetanus vaccine as a routine booster injection, thus providing continued protection against tetanus in children who have been initially immunised with combined diphtheria-tetanus-whooping cough vaccine, a standard procedure with this Department for the past three years.

Maternal and Child Health:

Clinic services continue to expand among all sections of the community. It is obvious that staff requirements will have to be reviewed.

Mosquito Control:

The opening of the Bluff tunnel so effectively drained the Van Riebeeck Park swamps, that this large source of mosquitoes was eliminated completely. Other sources at the Bayhead and elsewhere depicted the now familiar pattern of man's interference with nature followed by extensive mosquito development, followed by intensive engineering works to eliminate the nuisance.

Cato Manor:

The unsatisfactory hygienic conditions of the early part of the year coincided with the increasing lawlessness in the area. The situation exploded in the riots of June 18th. Out of the resultant autopsy came the far reaching decision by the Government to allow the City Council to develop part of the Umlazi Mission Reserve as a Bantu Township as the agent of the Government, thus bringing the end of Cato Manor into plainer view.

Air Pollution:

Although the physical implementation of air pollution control is not vested in the City Health Department, it remains of vital interest to the Department. The incidence of lung cancer was shown by medical research during the year to have reached serious proportions in the City. While Durban is well in the lead in South Africa in air pollution control there is no room for complacency. Air pollution remains one of the most serious health problems of the City.

Sewerage:

Blockages of sewers, overflowing manholes and other undesirable features continued, albeit on a lesser scale than in the previous year. It is not necessary to stress the health hazards of incomplete and inadequate sewage disposal to a close population. The disposal of human wastes is primarily a public health measure and as such deserves the highest priority.

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All other aspects of Departmental work, increasing inevitably with the expansion of the City, have been covered fully in the report.

Acknowledgements

To His Worship the Mayor and City Councillors I wish to express my thanks for their continued interest and encouragement in all health matters. To the Chairman and members of the Public Health Committee my thanks are due for their courtesy, active support and wise guidance. I also wish to thank other Heads of Departments and their staffs for their kindly co-operation.

In conclusion I would like to express my thanks to the members of my staff for their loyalty and unfailing enthusiasm, and to commend them for their efficient service throughout the year.

I have the honour to be,

Ladies and Gentlemen,

Your Obedient Servant,

A. Stephen.

A.STEPHEN

CITY MEDICAL OFFICER OF HEALTH

Corrigenda

Page 18 (last line) - read "Shumville" for "Shumbille".

Page 26 (4th paragraph, 3rd line) - read 'is' for 'are'

Page 28 (P.T.B. Notifications) - amend Clinics Total '972' to read '973' and total '2111' to read '2112'

Page 38 (6th paragraph - 8th line) - read 'tuberculin' for 'tuberculis'.

Page 54 (item (2)) - read 'one' for 'ine'

Page 72 (Chemical Standards) - read 'Chlorine' and Fluorine' for 'Chlorion' and 'Fluorion' respectively.

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C I T Y O F D U R B A N

REPORT OF THE CITY MEDICAL OFFICER OF HEALTH

for the

YEAR ENDED 31ST DECEMBER, 1959

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REPORT 'A'

I. NATURAL CONDITIONS AND STATISTICS

1. Area

The total area of the City was reflected in the 1958 Report as being 51,228 acres (80.04 square miles), but it has now been established that this figure should be 48,029 acres or 75.04 square miles by reason of the fact that the water surface area of the Bay of Natal does not fall under the jurisdiction of this local authority, but is administered by the Central Government.

2. Valuation: 1958 figures appear in parenthesis.

	Site		Buildings	
Gross Value	£79,660,900	(£69,785,480)	£126,359,620	(£113,069,630)
Total Gross Value of City	£206,020,520	(£182,855,110)		

	Site	Buildings	Total
Rateable Value	£65,668,170	£111,390,540	£177,058,710

Rates: Land: 7d. in the £ on rateable valuation.
Buildings: 3½d. in the £ on rateable valuation.
Agricultural Land: 1/- per acre per annum. There are only 2,474 acres of agricultural land in Durban.
Agricultural Buildings: Nil on those in actual use for agricultural purposes.

3. Geographical Data and Climate

Sited as it is at longitude 31° East and latitude 29° 52 minutes 30 seconds South, Durban has, in consequence of the influence of the warm south westerly flowing Mocambique Current and its geophysical position, a sub-tropical climate with an adequate rainfall. Somewhat humid in summer, it has a mild winter and throughout the year is subject to reasonable lateral movement of air. Natural air movement is restricted by the formation of inversion conditions in the winter months. The City's natural advantages of siting, labour resources and harbour facilities tend to lead to continuous and virile expansion in its industrial and commercial activities.

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4. METEOROLOGICAL DATA (By Courtesy of WEATHER OFFICE: DURBAN)

1959	24 Hour Shade Temperature		Relative Humidity			Barometer			Rainfall		
Month	Max.	Min.	Max.	Min.	Mean.	Max.	Min.	Mean.	Points	No. of Days on which rain fell	Highest Fall
January	27.0	19.9	95	62	79	30.03	29.81	29.91	1252	19	567
February	27.6	20.0	96	63	81	30.01	29.85	29.93	693	10	268
March	27.9	19.1	97	60	80	30.07	29.91	29.99	240	13	50
April	26.9	18.1	96	59	80	30.08	29.88	29.97	327	9	84
May	24.4	13.0	96	51	77	30.01	29.84	29.93	1522	7	580
June	23.6	8.8	94	42	73	30.24	30.08	30.15	0	0	0
July	23.5	10.5	97	50	77	30.29	30.11	30.20	1104	7	1003
August	23.5	10.4	94	42	74	30.24	30.05	30.15	796	7	636
September	23.5	13.4	95	56	77	30.23	30.00	30.11	366	6	215
October	24.0	16.8	96	63	81	30.12	29.93	30.02	833	16	446
November	24.8	17.6	95	64	81	30.13	29.93	30.02	746	17	238
December	26.4	19.3	95	63	81	30.04	29.84	29.94	746	18	293
Maximum for the Year	27.9	20.0	97	64	81	30.29	30.11	30.20	1522	19	1003
Minimum for the Year	23.5	8.8	94	42	73	30.01	29.84	29.91	0	0	0

5. Population (Estimated)

	1959	(Ratio)	1958	(Ratio)
Europeans	157,848	(26.74%)	154.763	(27.10%)
Coloureds	26,168	(4.43%)	25,003	(4.38%)
Bantu	192,513	(32.62%)	185,835	(32.54%)
Asiatics	213,675	(36.21%)	205,543	(35.98%)
All Races	590,204		571,144	

These figures are based on estimates by the Director of Census and Statistics.

6. Births

	Legitimate	Illegitimate	Total	%Illegitimate
European	3,095	72	3,167	2.24%
Coloured	856	201	1,057	18.68%
Bantu	2,106	3,888	5,994	64.86%
Asiatic	5,984	110	6,094	1.74%
Total	12,041	4,271	16,312	-

Crude Birth Rate

European	20.06	(21.01)
Coloured	40.39	(39.51)
Bantu	31.13	(33.06)
Asiatic	28.57	(29.61)
All Races	27.63	(28.30)

*Figures for 1958 in parenthesis.

Stillbirths recorded were as follows:

		Stillbirth rate
European	38	11.85
Coloured	19	17.64
Bantu	146	23.77
Asiatic	294	46.02

Comment:

The figures for Bantu births are unreliable. For other races the figures are computed on notifications under the Public Health Act and represent a fairly high degree of accuracy.

7. Deaths

	Male	Female	Total	
European	866	681	1,547	(1,460)
Coloured	131	99	230	(212)
Bantu	1,987	1,651	3,638	(3,516)
Asiatic	878	703	1,581	(1,516)
Total	3,862	3,134	6,996	(6,704)

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Crude Death Rate

European	9.74	(9.43)
Coloured	8.79	(8.48)
Bantu	18.90	(18.92)
Asiatic	7.40	(7.37)
All Races	11.85	(11.73)

Infant Mortality Rate

(Deaths of infants under the age of 1 year per 1,000 live births)

European	23.36	(28.58)
Coloured	45.41	(48.40)
Bantu	276.64	(275.1)
Asiatic	57.43	(67.7)
All Races	130.52	(-)

Maternal Mortality Rate

(Deaths from causes related to child birth per 1,000 live births)

European	-	(no deaths)	(.31)
Coloured	-	(no deaths)	(2.06)
Bantu	1.84		(1.46)
Asiatic	1.15		(1.71)

* 1958 figures in parenthesis throughout.

Comment: The infant mortality rate for Bantu is dependent for accuracy on the Bantu birth notifications, which, as has been indicated elsewhere, are unreliable. The probability is that a considerable number of Bantu births are not recorded and that as a consequence the infant mortality rate is considerably lower than that shown. The figure is included therefor more as a comparison with those of previous years on the assumption that the same set of circumstances prevailed. It is of interest to note that the comparative figures in 1950 and 1955 were 369.27 and 388.51 respectively.

Causes of Death

Detailed statistics concerning causes of death (corrected for outward transfer) are set out in the following pages in respect of:

(a) All deaths
(b) Infant deaths (under 1 year)
(c) Maternal deaths.

The causes are arranged in accordance with the abbreviated list of 150 causes of mortality of the International Code of the World Health Organisation. From the schedules it will be observed that heart disease and cancer are once again at the head of the list insofar as the European population is concerned, while the number of deaths from suicide increased from 12 to 25 and diabetes from 4 to 10 in this group. To some extent (the aetiology of cancer is not yet fully known) these figures reflect the environmental stresses to which we are subject - increased tempo of living, occupational strain, and a rising number of causes of anxiety and tension from the international level down to the minutiae of daily life.

As regards the non-Europeans the predominating causes are gastro-enteritis, pneumonia, tuberculosis, dysentery and deficiencies of nutrition. The environmental stresses here are more concerned with low economy, housing, sanitation and inadequate nutrition.

It is pleasing to note that the number of deaths from road accidents show a decrease on the previous year's figures of approximately 20%.

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CAUSES OF DEATH

(Classified according to International Intermediate List of 150 Causes from Sixth Revision, World Health Organisation, 1948)

Ref.		Cause of Death		E.		C.		B.			A.	Total	
A.	1	Tuberculosis of Respiratory System	001-008	11	(13)	15	(8)	228	(214)	36	(31)	290	(266)
A.	2	Tuberculosis of Meninges and Central Nervous System	010	1	(-)	2	(1)	15	(17)	6	(13)	24	(31)
A.	3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands	011	-	(-)	1	(-)	10	(10)	2	(1)	13	(11)
A.	4	Tuberculosis of Bones and Joints	012,013	-	(-)	-	(-)	2	(-)	-	(-)	2	(-)
A.	5	Tuberculosis, All other forms	014-019	2	(2)	-	(1)	19	(27)	3	(2)	24	(32)
A.	6	Congenital Syphilis	020	-	(-)	-	(-)	3	(-)	-	(1)	3	(1)
A.	10	All other Syphilis	022,023,026-029	-	(-)	-	(2)	7	(7)	-	(1)	7	(10)
A.	12	Typhoid Fever	040	-	(-)	1	(-)	21	(20)	2	(1)	24	(21)
A.	13	Paratyphoid Fever and Other Salmonella Infections	041,042	-	(-)	-	(-)	-	(2)	-	(1)	-	(3)
A.	16	Dysentery, All Forms	045-048	1	(1)	4	(4)	126	(101)	9	(6)	140	(112)
A.	20	Septicaemia and Pyaemia	053	4	(1)	-	(-)	2	(1)	1	(1)	7	(3)
A.	21	Diphtheria	055	-	(3)	1	(-)	4	(13)	5	(15)	10	(31)
A.	22	Whooping Cough	056	-	(-)	-	(-)	5	(5)	4	(2)	9	(7)
A.	23	Meningococcal Infections	057	1	(-)	-	(-)	2	(3)	2	(1)	5	(4)
A.	26	Tetanus	061	2	(-)	-	(-)	48	(68)	4	(7)	54	(75)
A.	28	Acute Poliomyelitis	080	1	(-)	-	(-)	-	(-)	1	(-)	2	(-)
A.	29	Acute Infectious Encephalitis	082	-	(1)	-	(1)	2	(2)	5	(4)	7	(8)
A.	32	Measles	085	-	(-)	-	(1)	37	(30)	8	(4)	45	(35)
A.	34	Infectious Hepatitis	092	1	(2)	-	(-)	3	(2)	2	(-)	6	(4)
A.	38	Schistosomiasis	123	-	(1)	-	(-)	-	(1)	-	(1)	-	(3)
A.	39	Hydatid Disease	125	-	(1)	1	(-)	-	(-)	-	(-)	1	(1)
A.	42	Other Diseases due to Helminths	124,126,128,130	-	(-)	-	(1)	-	(1)	-	(-)	-	(2)
A.	43	All Other Diseases Classified as Infective or Parasitic	036-039,049,054, 059,063-074, 086-090,093,095, 096,120-122 131-138	-	(-)	-	(-)	4	(1)	2	(-)	6	(1)

Ref.	Cause of Death		E.	C.	B.	A.	Total
A. 44	Malignant Neoplasm of Buccal Cavity and Pharynx	140-148	5 (10)	- (1)	- (1)	- (1)	5 (13)
A. 45	Malignant Neoplasm of Oesophagus	150	9 (6)	1 (1)	10 (10)	2 (-)	22 (17)
A. 46	Malignant Neoplasm of Stomach	151	37 (30)	2 (4)	7 (-)	17 (17)	63 (51)
A. 47	Malignant Neoplasm of Intestine, Except Rectum	152,153	18 (21)	- (1)	1 (1)	2 (2)	21 (25)
A. 48	Malignant Neoplasm of Rectum	154	13 (6)	1 (1)	1 (-)	1 (1)	16 (8)
A. [illegible]	Malignant Neoplasm of Larynx	161	4 (3)	- (1)	2 (-)	- (-)	6 (4)
A. 50	Malignant Neoplasm of Trachea, and of Bronchus and Lung, not specified as secondary	162,163	49 (45)	4 (3)	12 (12)	6 (4)	71 (64)
A. 51	Malignant Neoplasm of Breast	170	18 (22)	2 (3)	5 (3)	2 (2)	27 (30)
A. 52	Malignant Neoplasm of Cervix Uteri	171	4 (6)	3 (-)	7 (10)	4 (4)	18 (20)
A. 53	Malignant Neoplasm of Other and Unspecified Parts of Uterus	172-174	4 (10)	- (2)	3 (2)	3 (2)	10 (16)
A. 54	Malignant Neoplasm of Prostate	177	10 (12)	1 (-)	1 (1)	4 (-)	16 (13)
A. 55	Malignant Neoplasm of Skin	190,191	2 (-)	- (-)	- (-)	- (-)	2 (-)
A. 56	Malignant Neoplasm of Bone and Connective Tissue	196,197	2 (2)	- (-)	3 (1)	4 (2)	9 (5)
A. 57	Malignant Neoplasm of all Other and Unspecified Sites	155-160,164,165, 175,176,178-181, 192-195,198, 199	58 (62)	1 (6)	22 (32)	14 (9)	95 (109)
A. 58	Leukaemia and Aleukaemia	204	11 (4)	- (1)	1 (3)	5 (-)	17 (8)
A. 59	Lymphosarcoma and Other Neoplasms of Lymphatic and Haematopoitic System	200-203, 205	5 (10)	- (1)	3 (3)	5 (2)	13 (16)
A. 60	Benign Neoplasms and Neoplasms of Unspecified Nature	210-239	8 (9)	1 (-)	4 (1)	4 (5)	17 (15)
A. 63	Diabetes Mellitis	260	10 (4)	3 (-)	4 (2)	13 (14)	30 (20)
A. 64	Vitaminosis and Other Deficiency States	280-286	- (1)	2 (-)	158 (325)	10 (46)	170 (372)
A. 65	Anaemias	290-293	- (-)	- (-)	3 (-)	3 (-)	6 (-)
A. 66	Allergic Disorders: All Other Endocrine, Metabolic and Blood Diseases	240-245,253,254, 270,277,287-289 294-299	1 (6)	1 (2)	1 (6)	26 (17)	29 (31)

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Ref.		Cause of Death		E.		C.		B.		A.		Total	
A.	68	Psychoneuroses and Disorders of Personality	310-324,326	1	(1)	-	(-)	1	(-)	1	(-)	3	(1)
A.	70	Vascular Lesions Affecting Central Nervous System	330-334	156	(173)	12	(8)	87	(63)	176	(156)	431	(400)
A.	71	Nonmeningococcal Meningitis	340	2	(3)	2	(3)	25	(19)	10	(9)	39	(34)
A.	72	Multiple Sclerosis	345	1	(5)	-	(-)	-	(-)	-	(-)	1	(5)
A.	73	Epilepsy	353	2	(2)	-	(-)	7	(5)	1	(2)	10	(9)
A.	77	Otitis Media and Mastoiditis	391-393	-	(-)	-	(-)	2	(1)	1	(-)	3	(1)
A.	78	All Other Diseases of the Nervous System and Sense Organs	341-344,350-352, 354-369,380-384, 386,388-390, 394-398	10	(15)	-	(-)	16	(6)	5	(10)	31	(31)
A.	79	Rheumatic Fever	400-402	1	(-)	1	(-)	-	(-)	6	(-)	8	(-)
A.	80	Chronic Rheumatic Heart Disease	400-416	6	(11)	2	(-)	8	(9)	11	(27)	27	(47)
A.	81	Arteriosclerotic and Degenerative Heart Disease	420-422	403	(340)	24	(13)	46	(51)	142	(142)	615	(546)
A.	82	Other Diseases of Heart	430-434	131	(121)	15	(6)	89	(82)	157	(94)	392	(303)
A.	83	Hypertension with Heart Disease	440-443	34	(33)	5	(7)	26	(22)	-	(48)	110	(65)
A.	84	Hypertension without Mention of Heart	444-447	5	(-)	2	(-)	6	(4)	8	(7)	21	(11)
A.	85	Disease of Arteries	450-456	21	(18)	1	(2)	13	(11)	5	(1)	40	(32)
A.	86	Other Diseases of Circulatory System	460-468	21	(16)	1	(-)	8	(3)	4	(7)	34	(26)
A.	87	Acute Upper Respiratory Infections	470-475	-	(-)	1	(-)	1	(-)	1	(-)	3	(-)
A.	88	Influenza	480-483	1	(-)	-	(-)	-	(1)	5	(4)	6	(5)
A.	89	Lobar Pneumonia	490	25	(9)	2	(3)	63	(48)	29	(16)	119	(76)
A.	90	Broncho Pneumonia	491	94	(73)	30	(-)	519	(351)	290	(271)	933	(695)
A.	91	Primary Atypical, Other and Unspecified Pneumonia	492,493	4	(23)	1	(25)	35	(25)	18	(18)	58	(91)
A.	92	Acute Bronchitis	500	2	(1)	1	(-)	8	(2)	25	(21)	36	(24)
A.	93	Bronchitis, Chronic and Unqualified	501,502	1	(7)	4	(2)	4	(5)	16	(20)	25	(34)
A.	95	Empyema and Abscess of Lung	518,521	-	(-)	-	(-)	7	(11)	4	(1)	11	(12)
A.	96	Pleurisy	519	1	(1)	-	(-)	1	(-)	-	(-)	2	(1)
A.	97	All Other Respiratory Diseases	511-517,520,522-527	32	(13)	4	(4)	23	(16)	15	(6)	74	(39)

Ref.		Cause of Death		E.		C.		B.		A.		Total	
A.	99	Ulcer of Stomach	540	1	(2)	-	(-)	2	(-)	2	(2)	5	(4)
A.	100	Ulcer of Duodenum	541	6	(-)	-	(-)	1	(-)	-	(-)	7	(-)
A.	101	Gastritis and Duodenitis	543	-	(-)	-	(-)	-	(-)	-	(1)	-	(1)
A.	102	Appendicitis	550-553	3	(-)	-	(-)	1	(2)	1	(-)	5	(2)
A.	103	Intestinal Obstruction and Hernia	560,561,570	14	(8)	2	(3)	4	(7)	3	(4)	23	(22)
A.	104	Gastro-Enteritis and Colitis, Except Diarrhoea of the Newborn	571,572	5	(11)	7	(14)	647	(640)	126	(89)	785	(754)
A.	105	Cirrhosis of Liver	581	13	(18)	2	(-)	13	(19)	5	(7)	33	(44)
A.	106	Cholelithiasis and Cholecystitis	584,585	-	(7)	-	(-)	1	(1)	-	(1)	1	(9)
A.	107	Other Diseases of Digestive System	536-539,542-544, 545,573-580,582, 583,586,587	23	(19)	4	(3)	28	(27)	18	(5)	73	(54)
A.	108	Acute Nephritis	590	-	(4)	1	(-)	4	(1)	11	(1)	16	(6)
A.	109	Chronic Other and Unspecified Nephritis	591-594	17	(20)	4	(4)	17	(19)	14	(22)	52	(65)
A.	110	Infections of Kidney	600	17	(3)	-	(-)	11	(1)	7	(2)	35	(6)
A.	111	Calculi of Urinary System	602,604	1	(-)	-	(1)	-	(2)	-	(-)	1	(3)
A.	112	Hyperplasia of Prostate	610	-	(2)	-	(-)	-	(-)	2	(-)	2	(2)
A.	114	Other Diseases of Genito-Urinary System	601,603,605-609, 611-617,622-637	2	(6)	2	(-)	3	(1)	1	(1)	8	(8)
A.	115	Sepsis of Pregnancy, Childbirth and the Puerperium	640,641,681,682, 684	-	(-)	-	(-)	-	(1)	-	(2)	-	(3)
A.	116	Toxaemias of Pregnancy and the Puerperium	642,652,685,686	-	(-)	-	(1)	3	(-)	2	(2)	5	(3)
A.	117	Haemorrhage of Pregnancy and Childbirth	643,644,670-672	-	(-)	-	(-)	3	(4)	2	(2)	5	(6)
A.	118	Abortion without mention of Sepsis or Toxaemia	650	-	(-)	-	(1)	3	(2)	-	(-)	3	(3)
A.	119	Abortion with Sepsis	651	-	(1)	-	(-)	1	(1)	-	(2)	1	(4)
A.	120	Other Complications of Pregnancy, Childbirth and the Puerperium	645-649,673-680, 683,687-689	-	(-)	-	(-)	1	(1)	2	(2)	3	(3)
A.	121	Infections of Skin and Subcutaneous Tissue	690-698	-	(-)	-	(-)	3	(2)	-	(3)	3	(5)
A.	122	Arthritis and Spondylitis	720-725	1	(1)	-	(-)	2	(1)	-	(1)	3	(3)

Ref.	Cause of Death		E.		C.		B.		A.		Total	
A. 124	Osteomyelitis and Periostitis	730	-	(1)	-	(-)	-	(1)	-	(-)	-	(2)
A. 126	All Other Diseases of Skin and Musculoskeletal System	700-716,731-736, 738-744	1	(2)	-	(-)	-	(-)	2	(-)	3	(2)
A. 127	Spina Bifida and Meningocele	751	-	(1)	-	(-)	-	(1)	3	(-)	3	(2)
A. 128	Congenital Malformations of Circulatory System	754	5	(8)	2	(2)	4	(7)	3	(-)	14	(17)
A. 129	All Other Congenital Malformations	750-752,753,755-759	5	(3)	1	(2)	9	(9)	9	(12)	24	(26)
A. 130	Birth Injuries	760,761	3	(5)	-	(1)	41	(29)	12	(27)	56	(62)
A. 131	Postnatal Asphyxia and Atelectasis	762	7	(11)	2	(2)	53	(55)	12	(8)	74	(76)
A. 132	Infections of the Newborn	763-768	4	(4)	2	(6)	76	(102)	39	(44)	121	(156)
A. 133	Haemolytic Disease of the Newborn	770	2	(1)	1	(1)	5	(3)	-	(1)	8	(6)
A. 134	All Other Defined Diseases of Early Infancy	769,771,772	4	(-)	2	(-)	27	(45)	3	(8)	36	(53)
A. 135	Ill-defined Diseases Peculiar to Early Infancy and Immaturity Unqualified	773-776	32	(31)	14	(14)	184	(150)	44	(57)	274	(252)
A. 136	Senility Without Mention of Psychosis	794	10	(15)	1	(7)	22	(10)	2	(3)	35	(35)
A. 137	Ill-defined and Unknown Causes of Morbidity and Mortality	780-793,795	53	(45)	7	(5)	492	(508)	28	(35)	580	(593)
AE. 138	Motor Vehicle Accidents	E810-E835	19	(22)	7	(7)	33	(49)	21	(25)	80	(103)
AE. 139	Other Transport Accidents	E800-E802, E840-E866	3	(3)	2	(-)	8	(11)	3	(2)	16	(16)
AE 140	Accidental Poisoning	E870-E895	-	(2)	3	(-)	6	(6)	1	(5)	10	(13)
AE 141	Accidental Falls	E900-E904	5	(2)	-	(2)	3	(4)	4	(3)	12	(11)
AE. 142	Accident Caused by Machinery	E912	1	(1)	-	(-)	-	(-)	-	(-)	1	(1)
AE. 143	Accident Caused by Fire and Explosion of Combustible Material	E916	3	(-)	-	(-)	19	(8)	11	(9)	33	(17)
AE. 144	Accident Caused by Hot Substance, Corrosive Liquid, Steam and Radiation	E917,E918	-	(2)	-	(1)	-	(6)	6	(4)	6	(13)
AE. 145	Accident Caused by Firearm	E919	1	(1)	-	(-)	-	(-)	-	(-)	1	(1)

Ref.	Cause of Death		E.		C.		B.		A.		Total	
AE. 146	Accidental Drowning and Submersion	E929	1	(6)	3	(4)	3	(3)	7	(11)	14	(24)
AE. 147	All Other Accidental Causes	E910,E911, E913-E915, E920-E928, E930-E965	11	(19)	3	(4)	30	(37)	11	(10)	55	(70)
AE. 148	Suicide and Self-Inflicted Injury	E970-E979	25	(12)	-	(4)	14	(12)	11	(15)	50	(43)
AE. 149	Homicide and Injury Purposely Inflicted by Other Persons (Not in War)	E980-E985	3	(2)	3	(4)	80	(54)	6	(8)	92	(68)
	Totals		1547	(1460)	230	(212)	3638	(3516)	1581	(1516)	6996	(6704)

CAUSES OF INFANTILE DEATH UNDER ONE YEAR

Ref.	Cause of Death		E.	C.	B.	A.	Total
A. 1	Tuberculosis of Respiratory System	001-008	-	-	15	1	16
A. 2	Tuberculosis of Meninges and Central Nervous System	010	-	-	2	2	4
A. 3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands	011	-	-	2	-	2
A. 5	Tuberculosis, All Other Forms	014-019	1	-	8	2	11
A. 6	Congenital Syphilis	020	-	-	3	-	3
A. 12	Typhoid Fever	040	-	-	1	-	1
A. 16	Dysentery, All Forms	045-048	-	-	22	1	23
A. 20	Septicaemia and Pyaemia	053	1	-	1	-	2
A. 21	Diphtheria	055	-	-	2	-	2
A. 22	Whooping Cough	056	-	-	1	2	3
A. 23	Meningococcal Infections	057	1	-	1	2	4
A. 26	Tetanus	061	-	-	43	1	44
A. 29	Acute Infectious Encephalitis	082	-	-	1	-	1
A. 32	Measles	085	-	-	17	1	18
A. 34	Infectious Hepatitis	092	-	-	1	-	1
A. 43	All Other Diseases Classified as Infective or Parasitic	036-039,049, 054-059,063-074, 086-090,093,095 096,120-122, 131-138	-	-	2	-	2

Ref.		Cause of Death						
A.	57	Malignant Neoplasm of All Other and Unspecified Sites	155-160,164,165, 175,176,178-181 192-195,198,199	-	-	1	-	1
A.	64	Avitaminosis and Other Deficiency States	280-286	-	-	53	8	61
A.	65	Anaemias	290-293	-	-	-	1	1
A.	66	Allergic Disorders: All Other Endocrine, Metabolic and Blood Diseases	240-245,253,254, 270-277,287-289 294-299	-	-	2	-	2
A.	70	Vascular Lesions Affecting Central Nervous System	330-334	-	-	3	1	4
A.	71	Nonmeningococcal Meningitis	340	1	1	21	3	26
A.	77	Otitis Media and Mastoiditis	391-393	-	-	1	1	2
A.	78	All Other Diseases of the Nervous System and Sense Organs	341-344,350-352, 354-369,380-384, 386,388-390, 394-398	1	-	5	-	6
A.	81	Arteriosclerotic and Degenerative Heart Disease	420-422	-	-	2	-	2
A.	82	Other Diseases of Heart	430-434	1	1	-	-	2
A.	87	Acute Upper Respiratory Infections	470-475	-	-	1	-	1
A.	89	Lobar Pneumonia	490	1	1	10	10	22
A.	90	Broncho Pneumonia	491	5	13	270	84	372
A.	91	Primary Atypical, Other and Unspecified Pneumonia	492,493	-	-	19	4	23
A.	92	Acute Bronchitis	500	-	-	5	12	17
A.	93	Bronchitis, Chronic and Unqualified	501,502	-	-	2	3	5
A.	95	Empyema and Abscess of Lung	518,521	-	-	2	-	2
A.	96	Pleurisy	519	-	-	1	-	1
A.	97	All Other Respiratory Diseases	511-517,522-527	-	1	3	1	5
A.	99	Ulcer of Stomach	540	-	-	1	-	1
A.	104	Gastro-Enteritis and Colitis Except Diarrhoea of the Newborn	571-572	-	5	464	83	552
A.	107	Other Diseases of Digestive System	536-539,542,544, 545,573-580,582, 583,586,587	-	1	2	1	4
A.	108	Acute Nephritis	590	-	-	1	1	2

Ref.	Cause of Death		E.	C.	B.	A.	Total
A. 110	Infections of Kidney	600	-	-	2	-	2
A. 121	Infections of Skin and Sub-cutaneous Tissue	690-698	-	-	2	-	2
A. 127	Spina Bifida and Meningocele	751	-	-	1	3	4
A. 128	Congenital Malformations of Circulatory System	754	5	2	3	2	12
A. 129	All Other Congenital Malformations	750,752,753, 755-759	4	1	8	9	22
A. 130	Birth Injuries	760,761	3	-	41	12	56
A. 131	Postnatal Asphyxia and Atelectasis	762	7	2	53	12	74
A. 132	Infections of the Newborn	763-768	4	2	76	39	121
A. 133	Haemolytic Disease of the Newborn	770	2	1	5	-	8
A. 134	All Other Defined Diseases of Early Infancy	769,771,772	4	2	27	3	36
A. 135	Ill-defined Diseases Peculiar to Early Infancy and Immaturity Unqualified	773-776	32	14	184	43	273
A. 137	Ill-defined and Unknown Causes of Morbidity and Mortality	780-793,795	-	-	261	2	263
AE. 143	Accident Caused by Fire and Explosion of Combustible Material	E916	-	-	1	-	1
AE. 146	Accidental Drowning and Submersion	E929	-	-	1	-	1
AE. 147	All Other Accidental Causes	E910,E911, E913-E915, E920-E928,E930-E965	1	1	-	-	2
Ae. 149	Homicide and Injury Inflicted by Other Persons (Not in War)	E980-E985	-	-	1	-	1
Totals			74	48	1657	350	2129

C. INFECTIOUS DISEASES

No case of formidable epidemic disease was notified during the year.

2. Infectious Diseases Notifications

Set out below is a table showing the numbers and distribution of the more important infectious diseases occurring in Durban during 1959.

	E.	C.	B.	A.	Total
Brucellosis	-	-	-	1	1 (0.0017)
Cerebro-Spinal Meningitis	4	2	-	2	8 (0.0135)
Diphtheria	24	12	55	24	115 (0.1948)
Encephalitis	20	-	18	13	51 (0.0864)
Erysipelas	1	-	-	1	2 (0.0033)
Gonococcal Ophthalmia	-	-	68	8	76 (0.1287)
Leprosy	-	-	6	-	6 (0.0101)
Poliomyelitis	23	-	21	7	51 (0.0864)
Puerperal Sepsis	-	-	40	7	47 (0.0796)
Scarlet Fever	163	1	-	1	165 (0.2795)
Typhoid Fever	6	1	280	16	303 (0.5134)

(Incidence per 1,000 population in parenthesis)

3. General

The number of notifications of typhoid fever was higher than in the previous four years, well over two thirds of the cases occurring in Bantu persons who contracted the infection in the Cato Manor Area. Here well over 100,000 persons live in varying degrees of squalor and the incidence of typhoid is an index of the unsanitary conditions which exist. For reasons explained later in this report attempts at the introduction of sanitary measures have met with considerable resistance on the part of the inhabitants.

The incidence of scarlet fever continued at a fairly high level, and, as usual, was mainly confined to the European section of the community.

Diphtheria notifications showed a decrease when compared with the previous five year period. The prevalence of diphtheria, in all races, however, leaves no room for complacency and the need for continual vigilance concerning the disease remains as high as ever.

Poliomyelitis notifications showed an increase in comparison with 1958 although the incidence was less than in the years 1954-1957. Probably the relatively low incidence is due to the high level of immunity acquired by the townspeople during the years of high prevalence, together with that acquired by active immunisation.

Encephalitis notifications showed an increase, the great majority of cases being of an unknown virus origin.

3. Smallpox

No cases of this disease occurred. During the year vaccination programmes were of necessity curtailed in the face of disturbances in the Bantu locations. When conditions return to normal intensified programmes will be essential to keep up the state of vaccination.

4. Typhus

No cases of epidemic or murine typhus were reported during the year. Durban's freedom from this disease has continued since 1952.

5. Typhoid Fever

Set out below is a table indicating the number of notifications for the last five years, according to their racial distribution.

Of the typhoid fever notifications 22 patients, comprising 1 Coloured 7 Asiatics and 14 Bantu contracted the infection on premises in the City which do not fall under the jurisdiction of the City Council e.g. prisons and Government properties.

City Cases

	1955	1956	1957	1958	1959
European	8	5	6	7	6
Coloured	3	1	1	5	1
Asiatic	16	9	5	20	16
Bantu	73	52	110	246	280
Total	100	67	122	278	303

A comparative study of the incidence, death rates and case fatality rates in the early 1940's and late 1950's assists considerably in giving a perspective of the disease in Durban, as the following table illustrates.

Typhoid Fever Rates

Year	Europeans			Coloureds			Bantu			Asiatics		
	Notification rate	Death Rate	Case Fatality Rate	Notification Rate	Death Rate	Case Fatality Rate	Notification Rate	Death Rate	Case Fatality Rate	Notification Rate	Death Rate	C F i R
1942	1.16	0.09	8.13	1.53	0.11	(7.70)	2.21	0.52	23.78	0.23	0.10	4
1943	0.62	0.06	8.82	1.16	0.23	(20.00)	2.12	0.47	21.79	0.75	0.15	2
1944	0.34	0.05	16.21	0.34	-	-	1.49	0.51	34.26	0.47	0.11	2
1957	0.04	0.01	16.66	0.04	-	-	0.61	0.03	5.45	0.03	0.01	2
1958	0.04	-	-	0.19	-	-	1.32	0.11	8.13	0.09	0.004	
1959	0.04	-	-	0.04	0.04	(100.00)	1.45	0.11	7.50	0.07	0.01	1

NOTE: Notification and Death Rates are per 1,000 head of population
Case Fatality Rate is per 100 notified cases

It will be seen that there has been no change in the incidence amongs the European community over the last three years but that there has been a considerable decrease in the incidence of the disease as compared with some 17 years ago. It should be noted that no European deaths from this disease have been recorded in the last two years.

In the case of the Coloured group it must be emphasised that the numb of notifications is particularly low and that consequently the case fatality rate is of little significance.

Compared with the early 1940's the incidence amongst the Bantu has decreased, although there has been a most unsatisfactory rise over the last three years. The great change in the case fatality rate is no doubt attributable to the use of modern drugs such as "Chloromycetin".

Unfortunately early diagnosis of typhoid fever in the Bantu is not common, because as a rule medical attention is sought only when the disease is well advanced. Amongst the Asiatic community the general trend of the disease is one of decrease and here again the case fatality rate shows a satisfactory trend.

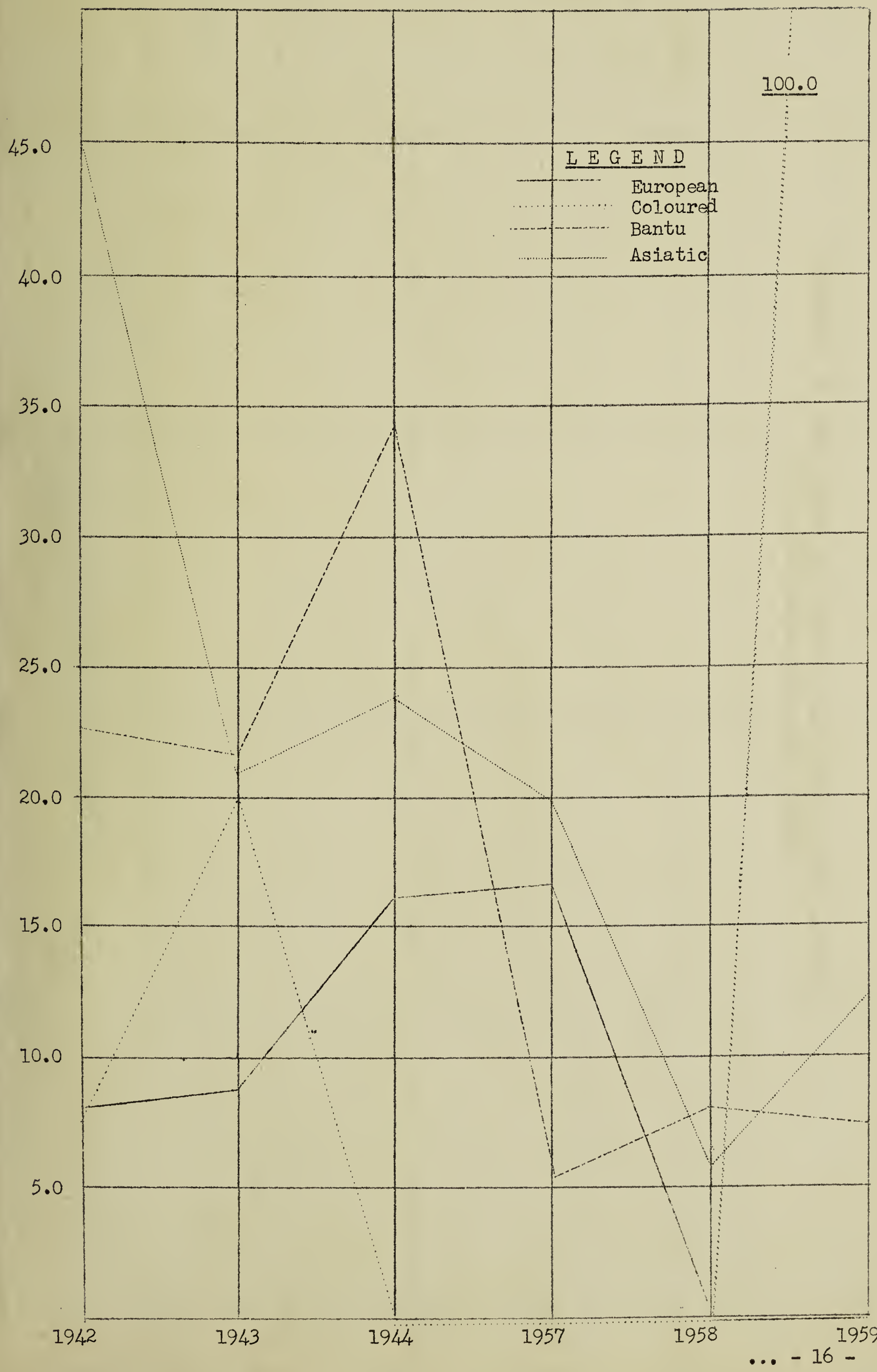
The notification and death rates per 1,000 head of population are set out graphically for ease of reference.

The graph showing the case fatality rate is also set out (page 15) but no curve is inserted for the Coloured group in 1959 as there was only one case.

T Y P H O I D F E V E R

CASE FATALITY RATE PER 100 NOTIFICATIONS

YEARS 1942 - 1944 AND 1957 - 1959



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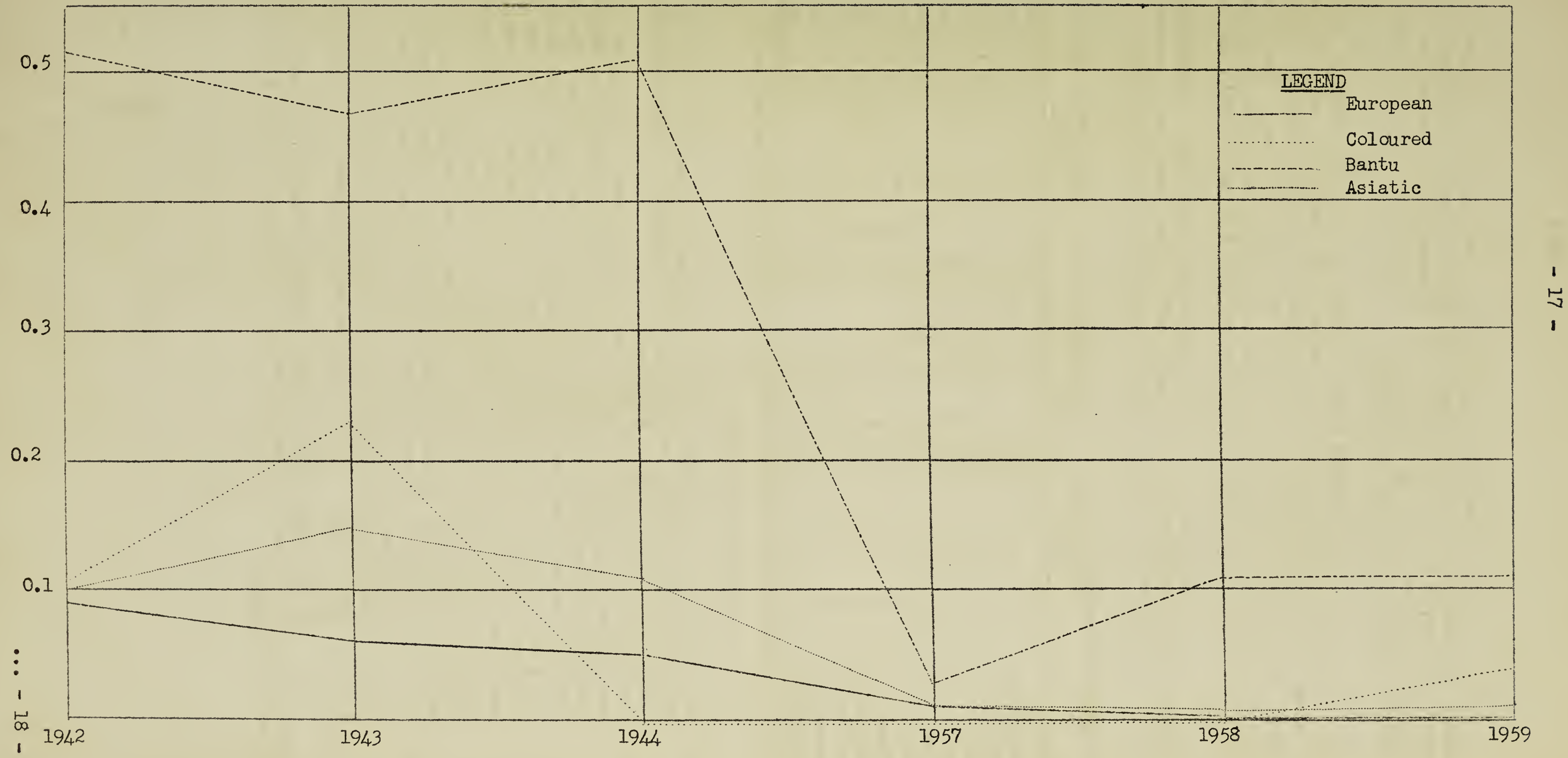
TYPHOID FEVER: NOTIFICATION RATES PER 1,000 HEAD OF POPULATION
YEARS: 1942 - 1944 AND 1957 - 1959

TYPHOID FEVER: DEATH RATES PER 1,000 HEAD OF POPULATION
YEARS 1942 - 1944 AND 1957 - 1959



It is immediately apparent that, over the years, by far the greatest number of cases have occurred amongst the Bantu. Despite the large number of Bantu cases, the effect on the incidence of the disease in other races has been remarkably low, when the part played by the Bantu in foodhandling, care of children and domestic help is taken into consideration.

Of the 280 Bantu cases notified in 1959, 229 occurred in the Cato Manor Area. Forming the major part of this area is the Emergency Camp, the land of which is owned by the City Council and is provided with roads, standpipe water supplies and except for isolated small areas, ablution and latrine blocks. The houses in this area are of a better standard than those existing in the surrounding areas, where there are no ablution blocks, no public latrines and very limited pure water supplies.

Set out below is a table depicting the monthly notifications of the disease in the Emergency Camp, the surrounding shack areas and the remainder of the City. The figures for 1958 are given in parenthesis for comparison

Month	Emergency Camp		Remainder of Shack Areas		Rest of City		Total	
January	9	(14)	5	(11)	4	(8)	18	(33)
February	12	(19)	5	(15)	2	(6)	19	(40)
March	22	(14)	15	(9)	5	(8)	42	(31)
April	22	(15)	12	(10)	4	(12)	38	(37)
May	18	(22)	21	(17)	10	(11)	49	(50)
June	15	(9)	7	(10)	8	(5)	30	(24)
July	9	(5)	10	(8)	-	(4)	19	(17)
August	3	(5)	4	(3)	6	(2)	13	(10)
September	4	(1)	4	(-)	4	(4)	12	(5)
October	3	(-)	6	(4)	7	(6)	16	(10)
November	8	(3)	6	(3)	15	(4)	29	(10)
December	4	(2)	5	(1)	9	(8)	18	(11)
Total	129	(109)	100	(91)	74	(78)	303	(278)

It will be observed:

(a) that the overall notifications of the disease increased sharply in March and remained high until the end of June and thereafter remained relatively low except for another peak in November;

(b) that whilst in 1958 and 1959 the month of May showed the highest totals, there were fewer cases in 1959 during the hot months of January and February but more cases during the winter months. The extent to which this was due to the interference with essential health services in the Cato Manor Area following the riots in June and the subsequent unsettled conditions is hard to say, although detailed investigation of cases, immunisation of contacts, health education and fly control were reduced to a low level. Furthermore, after the 278 cases in 1958, a number of carriers must have played a part in contributing to the high endemicity of disease, more especially when it is computed that about 3% of cases remain carriers for a year or longer;

(c) that the notifications are highest in the Emergency Camp. This is no doubt due to two factors: the population of the Emergency Camp is far higher than in the surrounding shack areas and the blocking of sewers with subsequent spillage over streets and into streams was widespread and continuous.

It is noted that the worst affected areas in the Emergency Camp were Benoni 16 cases, Cabazini 16 cases, Nsimbini 17 cases, Newclare 4 cases and Shumbille 10 cases.

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To further illustrate the position a summary of the Bantu notifications set out below showing the area distribution in age groups:

	Emergency Camp			Shack Areas			Rest of City			Overall		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
to 28 days	-	-	-	-	-	-	1	-	1	1	-	1
- 3 months	-	1	1	-	-	-	-	-	-	-	1	1
mths.- 1 yr.	1	-	1	1	-	1	-	-	-	2	-	2
- 2 years	-	-	-	1	-	1	-	-	-	1	-	1
- 5 years	3	6	9	6	5	11	1	-	1	10	11	21
- 14 years	17	31	48	11	14	25	4	3	7	32	48	80
- 24 years	11	18	29	8	16	24	10	6	16	29	40	69
- 44 years	11	22	33	14	19	33	15	7	22	40	48	88
- 64 years	3	5	8	2	3	5	3	1	4	8	9	17
er 64 years	-	-	-	-	-	-	-	-	-	-	-	-
otal	46	83	129	43	57	100	34	17	51	123	157	280

Noteworthy features of the above totals include:

) the highest incidence falls in the age groups 5 - 44 years;
) females are more affected than males and this is especially so in the Shack Areas and Emergency Camp, whilst elsewhere in the City male notifications predominate.
) It can be inferred that in the Emergency Camp and the Shack Areas women and children are mainly infected. This can, to some extent be accounted for by the fact that women and children spend most of their days in the areas, washing clothes in infected streams whilst their children play on sewage polluted roads and bathe in contaminated rivers.

In the Cato Manor Shack Areas only 24 of the cases had been resident the area for under 6 months; in the Emergency Camp 25 persons used pit latrines the surrounding bush, and in the shack areas 86 persons made use of the bush and t latrines. All other cases were served with communal waterborne latrines.

In contrast, in the housing schemes at Lamontville and Umlazi Glebe cases occurred and this despite the severe floods which interfered temporarily th sewage disposal at Lamontville. At Chesterville, a housing scheme adjacent and accessible only through the Emergency Camp, 10 cases occurred.

From the preceding report it must be apparent that no matter what her measures are introduced, the fundamental principle of providing satisfactory using, adequately supplied with water and water borne sewage is the only way reducing the toll of morbidity from this disease, provided a reasonable degree co-operation from the inhabitants can be obtained.

ntrol Measures

Up to the time of the riots in June each case was intensively investi- ted, the home being visited by a European Inspector and advice and immunisation the contacts proffered. After the riots the shack areas from time to time came unsafe and many home investigations were carried out by Bantu Health sistants, whose training is perforce limited by their educational standard. ain extensive and intensive immunisation programmes were initiated in all areas, th special reference to shack dwellers and foodhandlers in hotels and boarding tablishments. There, once more, the campaigns had of necessity to be curtailed the Cato Manor Area after the riots, although with the co-operation of Natal ambers of Industry and Commerce many Bantu employees were immunised at their aces of work. Stool sampling and vi-testing of contacts, especially those con- rned with foodhandling were carried out but without rewarding results. Investi- tions into blocked sewers and the direct relationship between cases in the ographical environs was not conclusive, but the continual and increasing spillage peared to be related to the increased incidence generally.

Health education on an intensive scale, directed to the value of immunisation and the basic precepts of sanitation and hygiene was carried out, although in the Cato Manor Areas, a disruption of the services occurred following the unruly behaviour of the inhabitants.

Anti-fly campaigns proceeded apace and these included refuse removals, general cleaning of the area, insecticidal spraying and adult fly poisoning. Here again, in the Cato Manor Areas, a serious breakdown in the services occurred after June 1959.

The ascendancy of lawless elements in the Cato Manor Area and the general antipathy engendered by them to all forms of control rendered the task of health personnel extremely difficult. Law and order are pre-requisites of public health control.

The level of the European cases notified is on a par with that of previous years and the Coloured community, in whom the incidence is normally low were almost unaffected. The number of Asiatic cases was surprisingly lower than in 1958, despite the floods which occurred in April, affecting areas occupied by the Asiatic community.

Of the 6 European cases, one, a female of 25 years was an asymptomatic carrier discovered on routine examination by her practitioner. Another case, who worked in a hospital, was fully immunised 2 years previously and had had a booster 1 year before her illness. The remainder of the cases had no unusual features and the source of the disease remained obscure, despite intensive investigations.

Deaths from typhoid fever amongst City cases numbered 24 comprising 21 Bantu, 2 Asiatics and 1 European.

6. Diphtheria

City notifications numbered 115 representing a decrease of 56 cases on that of the previous year. The decrease affected all race groups except the Coloured, among whom there was an increase. Analysis shows that most notifications occurred in the month of May (27) and that from September to December a comparatively small number of persons were afflicted (10).

Seven of the notifications related to carriers comprising 3 European, 2 Coloured and 2 Asiatic, all under 14 years of age. The 3 Europeans and one of the Coloured carriers had previously been immunised.

Fifteen of the cases notified had a history of previous immunisation and these comprised 10 European, 1 Coloured, 2 Asiatic and 2 Bantu. Deaths comprised 1 Coloured, 4 Bantu and 5 Asiatic persons.

The table overleaf sets out the number of notifications, the notification dates, the number of deaths and the case fatality rates in Durban over the last twenty years.

The overall notification rate or incidence shows a fairly steady decline which is gratifying, and points to the steady increase in herd immunity resulting from immunisation. On the other hand, despite modern advances in medicine, the case fatality rate is most depressing and serves as a grim reminder of the deadliness of this infectious disease.

The position is further illustrated graphically on pages 22 and 23.

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1940 TO 1959

(Notification Rate per 1,000 Population : Mortality Rate per cent. of Total Notifications)

YEAR	EUROPEANS				COLOUREDS				BANTU				ASIATICS				ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1940	194	2.10	3	1.55	21	2.60	-	0.00	16	1.23	2	12.50	23	0.26	1	4.35	254	0.98	6	2.36
1	228	2.44	5	2.19	18	2.18	-	0.00	42	0.59	7	16.67	8	0.09	1	12.50	296	1.13	13	4.39
2	262	2.48	2	0.76	26	3.07	1	3.85	63	0.85	4	6.35	14	0.15	-	0.00	365	1.30	7	1.92
3	295	2.76	9	3.05	24	2.80	2	8.33	44	0.60	2	4.55	15	0.16	3	20.00	378	1.34	16	4.23
4	416	3.84	7	1.68	74	8.43	-	0.00	73	1.01	16	21.92	36	0.37	2	5.56	599	2.09	25	4.17
5	255	2.33	6	2.35	36	4.01	1	2.78	116	1.61	9	7.76	37	0.37	-	0.00	444	1.53	16	3.60
6	154	1.23	7	4.55	17	1.66	1	5.88	64	0.59	7	10.94	38	0.33	10	26.32	273	0.76	25	9.15
7	156	1.23	4	2.56	24	2.26	2	8.33	110	1.01	9	8.18	46	0.39	7	15.22	336	0.92	22	6.55
8	73	0.57	1	1.37	8	0.73	-	0.00	93	0.85	12	12.90	18	0.15	5	27.78	192	0.52	18	9.37
9	95	0.73	-	0.00	21	1.85	2	9.52	66	0.60	12	18.18	39	0.32	6	15.38	221	0.59	20	9.05
1950	145	1.10	1	0.69	34	2.65	2	5.88	124	0.97	18	14.52	58	0.45	7	12.07	361	0.90	28	7.75
1	58	0.45	2	3.45	14	0.94	2	14.29	150	1.12	24	16.00	47	0.32	11	28.40	269	0.63	39	14.50
2	50	0.38	4	8.00	7	0.45	-	0.00	103	0.73	19	18.45	51	0.34	11	21.57	211	0.48	34	16.11
3	39	0.28	2	5.13	26	1.51	5	19.23	76	0.51	19	25.00	49	0.32	11	22.45	190	0.41	37	19.47
4	25	0.17	1	4.00	8	1.44	-	0.00	48	0.30	6	12.50	19	0.12	-	0.00	100	0.21	7	7.00
5	75	0.50	1	1.33	34	1.82	2	5.88	102	0.61	16	15.69	69	0.42	15	21.74	280	0.56	34	12.14
6	70	0.46	5	7.14	13	0.67	1	7.69	43	0.24	17	39.53	69	0.40	12	17.39	195	0.37	35	17.95
7	38	0.25	4	10.53	5	0.21	-	0.00	37	0.21	11	29.73	31	0.16	3	9.68	111	0.20	18	16.21
8	38	0.25	3	7.89	6	1.24	-	0.00	57	0.31	13	22.81	70	0.34	15	21.43	171	0.30	31	18.13
1959	24	0.15	-	0.00	12	0.46	1	8.33	55	0.29	4	7.27	24	0.11	5	20.83	115	0.19	10	8.69

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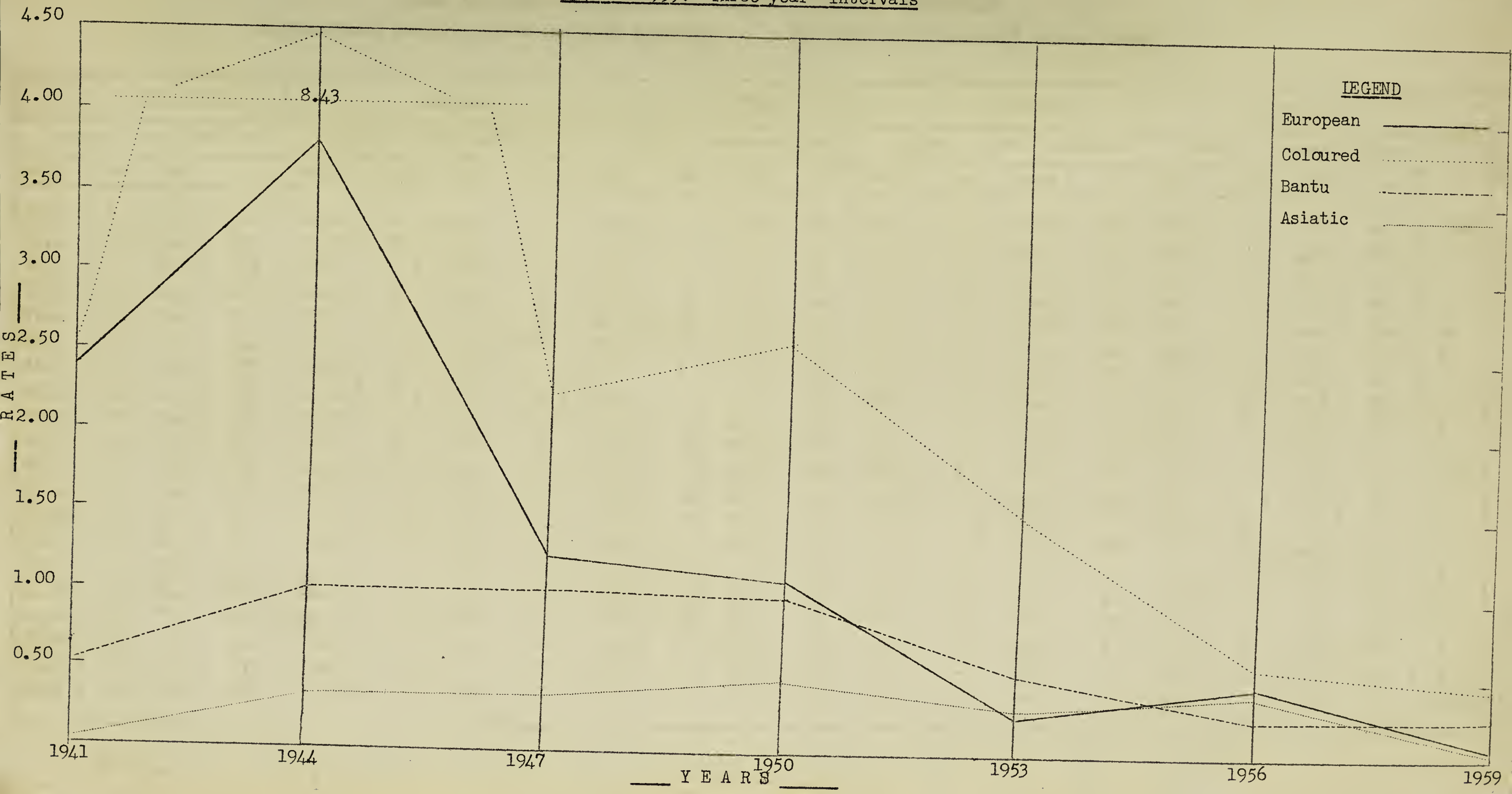
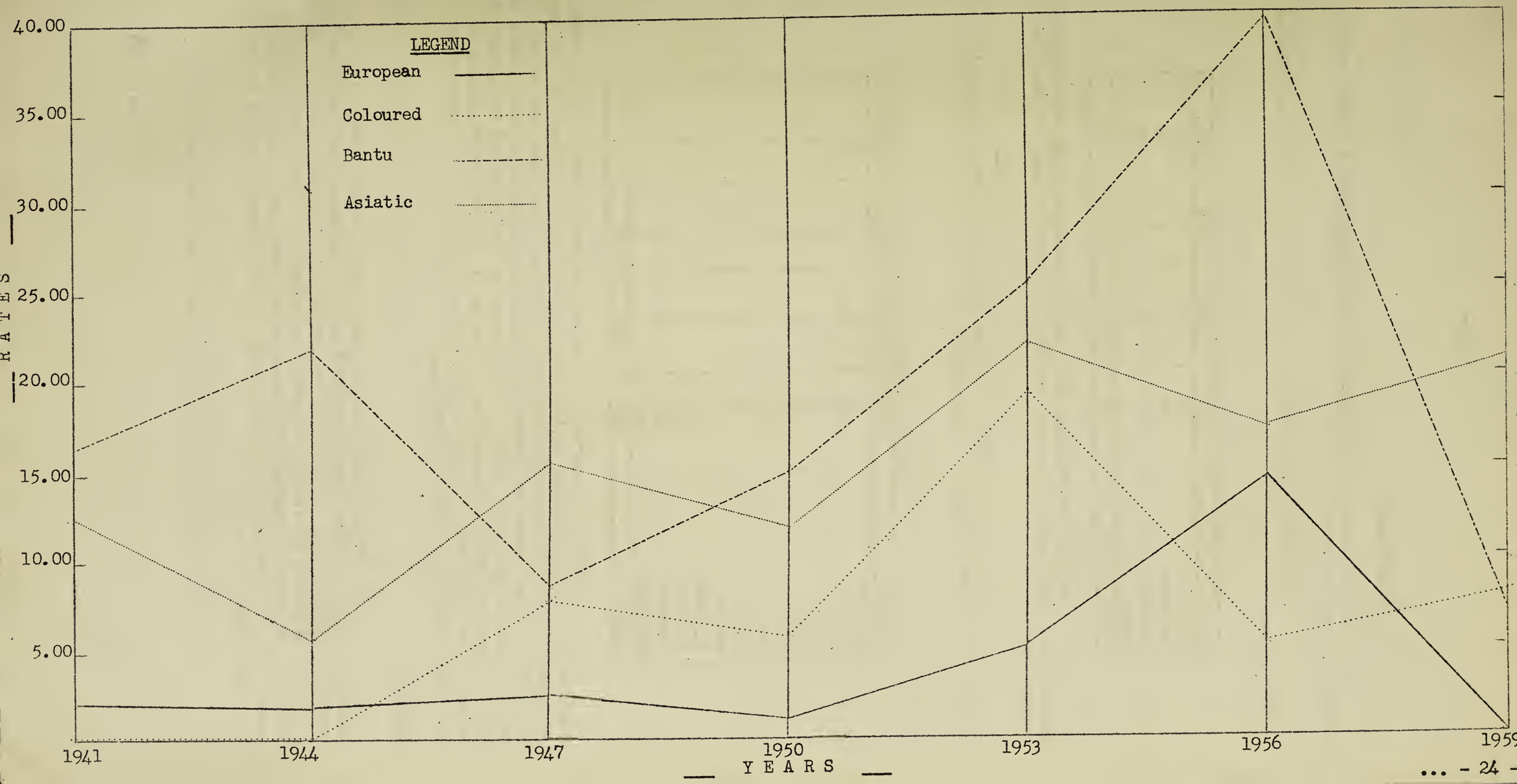
DIPHTHERIA NOTIFICATION RATES PER 1,000 HEAD POPULATION

1941 to 1959: Three-year Intervals



DIPHTHERIA DEATH RATES: PER CENT OF TOTAL NOTIFICATIONS

1941 to 1959: Three-year Intervals



7. Poliomyelitis

The number of notifications (51) represents a slight rise in incidence over the previous year.

The table below sets out the distribution of cases notified during the past 4 years.

	1956	1957	1958	1959
European	82	113	13	23
Coloured	18	7	1	-
Asiatic	26	16	7	21
Bantu	32	27	6	7
Total	158	163	27	51

It will be observed that, as in previous years, the European community was the worst afflicted, although the ratio of Asiatic cases to European shows a marked rise.

The monthly incidence during 1959 is reflected below, the corresponding figures given for purposes of comparison:

City Poliomyelitis Cases

Month	1956	1957	1958	1959
January	4	46	1	10
February	7	47	4	5
March	2	28	2	6
April	2	18	2	1
May	10	9	3	4
June	2	3	1	4
July	7	3	1	2
August	5	1	2	2
September	11	1	-	2
October	10	3	4	2
November	22	3	1	7
December	76	1	6	6
Total	158	163	27	51

It will be observed that cases occurred sporadically throughout the year, with a slight increase during the summer months. Eighteen of the cases occurred in the 1 - 2 year age group and 11 in the 3 - 5 year age group. All the Bantu cases were 5 years or under which was to be expected as the natural immunity in this race is of a high order. In the case of the Europeans and Asiatics the under 2 year age group predominated, although 13 of the European and 2 of the Asiatic cases were over 5 years of age. Four persons over 24 years of age contract the disease and they were all Europeans.

Contacts

All contacts were investigated, and as in the previous year, the Union Department of Health was furnished with a completed questionnaire for every case of poliomyelitis. In only two instances did the disease occur in patients with a history of having previously received inoculation. In the one instance, a European, the patient received the inoculation from a private practitioner in another centre, and the disease ran a mild course. No confirmation could be established in the second case, a Bantu.

One European and one Asiatic case died from the disease.

8. Encephalitis

Of the 51 notifications only in nine cases was a precise etiological factor established, viz: measles encephalitis 2 Europeans and 1 Bantu; mumps encephalitis 4 Europeans; whooping cough encephalitis 2 Asiatics. In the remaining cases the actual virus was not established. The age group most affected was the 14 - 24 year old.

There were 7 deaths from encephalitis, 2 of which were Bantu and 5 Asiatic: this figure is one less than in the previous year.

9. Scarlet Fever

The distribution of the disease in the City is of interest as more than half the cases (69) occurred in Durban South. The age groups most affected were between 5 and 14 years, followed by the 2 to 5 year old age group. Only a few cases occurred in other age groups. The highest incidence of the disease was in August and the fewest notifications occurred during the summer months. As previously the majority of notifications was in respect of Europeans.

There were no deaths from this disease.

10. Cerebro-Spinal Meningitis

The low incidence of this disease (8 cases as against 23 in 1958) is surprising and its absence amongst the Bantu even more so as conditions in Cato Manor greatly favour dissemination of the disease.

Five deaths occurred, made up of 1 European case, 2 Asiatic and 2 Bantu.

11. Leprosy

Six cases, all Bantu, were notified, a decrease over the last three years' figures.

12. Brucellosis

Only one case was notified and this appeared to be a relapse of the case reported upon last year.

13. Gonococcal Ophthalmia

Bantu cases notified numbered 68 and Asiatic cases 8, a total of 76, the other races being unaffected. There is littls doubt that the incidence of this disease is far higher than the notifications would suggest.

14. Malaria

No local cases occurred but particular care has to be exercised to ensure that the disease does not invade the northern parts of Durban as a result of anopheline mosquito extension southwards.

Only two imported cases were notified, one a European child with a P. Falciparium infection, and the other a Bantu male, who died from cerebral malaria.

In the case of the European child, the infection was probably contracted in the course of an extensive motor tour covering Game Reserves and outside the Union.

The Bantu case appeared to have contracted the infection in Zululand.

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III. OTHER COMMUNICABLE DISEASES

Bilharzia

Public health work on the preventive aspects of this disease continued during the year in all parts of the City, with special emphasis on the new Bantu Township of kwaMashu.

In conjunction with the Union Health Department, the snail survey covering the main water courses and dams at kwaMashu continued and a great number of snails were examined. Of these, only 3 Physopsis species showed infestation with human type cercariae whilst none of the Biomphalaria species showed any infestation. However confirmation of the presence of the vectors (P. africana and B.pfeifferi) was obtained.

A survey of 225 children at a nursery school in kwaMashu revealed that none of the children under 5 years were infected although 4 cases were found in children over 5 years.

The conditions at this township are conducive to the spread of infection among the population. The provision of a swimming bath and paddling pools for toddlers are receiving attention, and progress has been made in the canalisation of slow moving water courses.

The General Assistants in the Field Hygiene Section of the Department are now receiving training in control of bilharzia, with particular emphasis on mollusc surveys.

During the year danger points in the City were pin-pointed and warning notices affixed in prominent positions. These notices are in three languages - English, Afrikaans and Zulu.

Molluscidal treatment of rivers and dams continues to be investigated and it is hoped that many of the problems inherent in this approach to the prevention of the disease will be resolved shortly.

The provision of an outpatient clinic has been pursued with the Provincial Administration throughout the year, but as yet, a general clinic where patients suffering from schistosomiasis in the kwaMashu area can readily be treated has not materialised.

Food Poisoning

No outbreaks of food poisoning occurred during the year. I feel certain that the Department's intensive pursuance of food establishment and food handler hygiene is not without credit for this very satisfactory state of affairs.

Benign Myalgic Encephalomyelitis

During this year ten cases of a neurological illness with myalgia, pareses and sensory phenomena occurred in Durban. The disease pattern was distinct from poliomyelitis and different from the "Mystery Disease" which occurred amongst the nursing staff of Addington Hospital in 1955. The general clinical picture followed the patterns set out in the British Journal of Clinical Practice (March, 1958).

Six of the cases occurred in January and of these 1 male and 3 females were employed at the Isolation Hospital, but lived at their respective homes and worked in the wards, whilst the fifth and sixth cases, both females, had no connection with the hospital at all.

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Early in February two more employees of the Isolation Hospital, both females, developed the same condition.

In April a further case occurred in a student nurse at the Isolation Hospital, and in May another case occurred in a female, who had had had no traceable connection with the hospital.

Intensive investigation into possible causes, ranging from a search for a common insecticide, cooking oil or foodstuff, to virus studies yielded no positive results.

Amoebiasis

The problem of amoebiasis continues to be the subject of intensive research and the City is fortunate indeed to have the Amoebiasis Research Unit stationed here, where the problem of this disease is of some magnitude, especially amongst the Bantu community.

Dr. R.Elsdon-Dew, the Director of the Unit has kindly furnished information on the work of the Unit during the last year and some aspects of the fields of activity covered are set out below:

1. The new Institute for Parasitology has been completed and an expansion of the Unit's activities is now possible. A study of parasites other than amoeba, particularly in regard to host-parasite relationships will be undertaken.

2. The effect of various agents on the activities of the amoeba in man continues as one of the main projects in the search for an ideal amoebicide. Results thus far indicate that the choice of therapy in acute amoebic dysentery should be based on the fact that combinations of quinolines potentiate sub-effective doses of tetra-cyclines. In cases of hepatic infection emetine still remains the most effective drug available, although once abscess formation has occurred, aspiration is an essential additional therapy to remove the pus after the amoebae have been destroyed.

3. Studies of the effect on the human of invasion of amoebae from the haematological and biochemical aspects as well as amoebic invasion of the liver in children was undertaken. The possible effect of other parasites in the initiation of the invasive phase of E.histolytica was investigated and a study of the effect of diet on the host parasite relationship was commenced. Another long term study covers the serological response by humans to amoebic infection.

4. It is inevitable that other parasites come under observation as the Unit handles large amounts of material and acts in a consultative capacity. During the year a case of infection with Capillaria hepatica was encountered and human coccidians, Isospora belli, I hominis, and I notalensis infections were encountered.

5. Studies on visceral larvae migrans, bilharziasis, cysticercus cellusae and the effect of parasitism in industrial productivity of the host and the effects of treatment on output are in hand.

6. A questionnaire, aimed at assessing the incidence of amoebiasis all over the world, was prepared by the Director and has been circulated by the World Health Organisation.

Finally, the thanks of this Department are due to the Director for his interest and willing assistance in the various parasitological problems which this Department encounters from time to time.

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IV. TUBERCULOSIS

1. Introduction

The number of known City cases of pulmonary tuberculosis is set out hereunder, the figures for the previous year being given in parenthesis:

European	819	(765)
Coloured	546	(497)
Asiatic	2,102	(1,850)
Bantu	4,699	(6,451)
Total	8.166	(9,563)

The new filing system introduced last year was completed except for the Bantu and here, work is still proceeding apace. The decrease in the number of known Bantu cases is a direct result of the investigation into each case, resultant on the new filing system. Cases which appear to have left Durban permanently or who have not been traced over several years have been eliminated from the current files, as well as all cases known to have died.

However, the Bantu figures must be accepted with some reserve as this racial group of the community is always on the move, many persons changing their residential addresses with a frequency that results in a certain percentage of cases being lost.

2. Statistics of City Cases

(i) Notifications

(a) Pulmonary Tuberculosis

Set out below is a table of City cases notified indicating the racial groups and the source of notification, together with the attack rate of the disease.

Notifications

	E.	C.	B.		A.	Total
Clinics	38	27	787		121	972
Hospitals	55	72	780		211	1,118
Private Practitioners	5	-	1		1	7
Other local authorities	9	1	3		1	14
	107 (95)	100 (92)	1,571	(1,962)	334 (416)	2,111(2,5
Attack Rate (Per 1,000 (population)	0.68(0.61)	3.82(3.68)	8.16	(10.55)	1.56(2.02)	-

Figures for 1958 are inserted in parenthesis).

City Cases Notified - Age Groups

Age Groups	E.	C.	B.	A.	Total
Under 5 years	12	23	282	43	360
5 to 14 years	2	8	97	33	140
14 to 24 years	13	14	244	76	347
24 to 44 years	34	40	705	100	879
44 to 64 years	39	11	201	68	319
Over 64 years	7	4	42	14	67
Total	107	100	1,571	334	2,112

Comment

(a) It will be noted that the overall notifications show a decrease of 453 and that the decrease in notifications has occurred mainly in the Bantu racial group (391). There is no inference here however that there has been a corresponding decrease in the incidence of the disease. The wanton destruction of the Cato

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Manor clinic during the riots of June, 1959 was probably the major factor in the drop in the number of cases discovered.

(b) The increase in European and Coloured notifications in the light of a study of the attack rates does not appear to be significant but the decrease in Asiatic notifications points to a trend in the right direction as the decline has persisted since 1956.

(c) As in past years the majority of the notifications have been received from clinics and hospitals. Many private practitioners refer the majority of their suspect cases to the clinics for investigation and, if necessary, treatment.

(d) The graph (A), wherein attack rates and death rates for the period 1941 - 1959 are shown reflects to some extent the trend of pulmonary tuberculosis in Durban and indicates the challenge posed by the number of Bantu cases notified. That treatment is effective is demonstrated by the falling death rate in the Bantu. The need is for additional clinic facilities to intensify case finding and treatment.

(e) In all the non-European race groups the notifications are highest in the 24 - 44 year old group.

(f) The number of notifications in the under 5 years age group is high in all races. It would appear that a more intensive B.C.G. vaccination campaign would bear fruit in this age group.

(ii) Deaths: City Cases

These are set out below, together with rates, the previous year's figures being given in parenthesis:

	E.	C.	B.	A.	Total
Deaths	10 (6)	15 (7)	216 (135)	34 (23)	275 (171)
Death Rate (Per 1,000 population)	0.06 (0.08)	0.57(0.32)	1.12(1.15)	0.16(0.15)	0.47(0.46)

Comment

(a) The trend in death rates is illustrated on the graphs (pages 30 and 31) and suggests a stabilisation in death rates, bearing in mind that a number of chronic cases, kept alive for years by tuberculostatic drugs, must now be having the effect of 'loading' the number of deaths.

(b) The death rate amongst the Bantu is to a large extent accounted for by the fact that ambulant Bantu patients attend irregularly and generally only when their condition materially deteriorates. Once they feel well, the necessity for treatment or for a 'check up' at the clinic becomes incomprehensible to this racial group and many are literally pulled from the brink of the grave time and time again. Meanwhile, of course, they act as a reservoir of infection to others and finally become established as chronic cases acting as a permanent reservoir of infection, unable to face competition with other workers, and becoming a drain on state and charitable funds for invalidity and unemployment.

B. Non-Pulmonary Tuberculosis

(a) Notifications

European	1 (2)
Coloured	3 (2)
Asiatic	53 (55)
Bantu	97 (79)
Total	154 (138)

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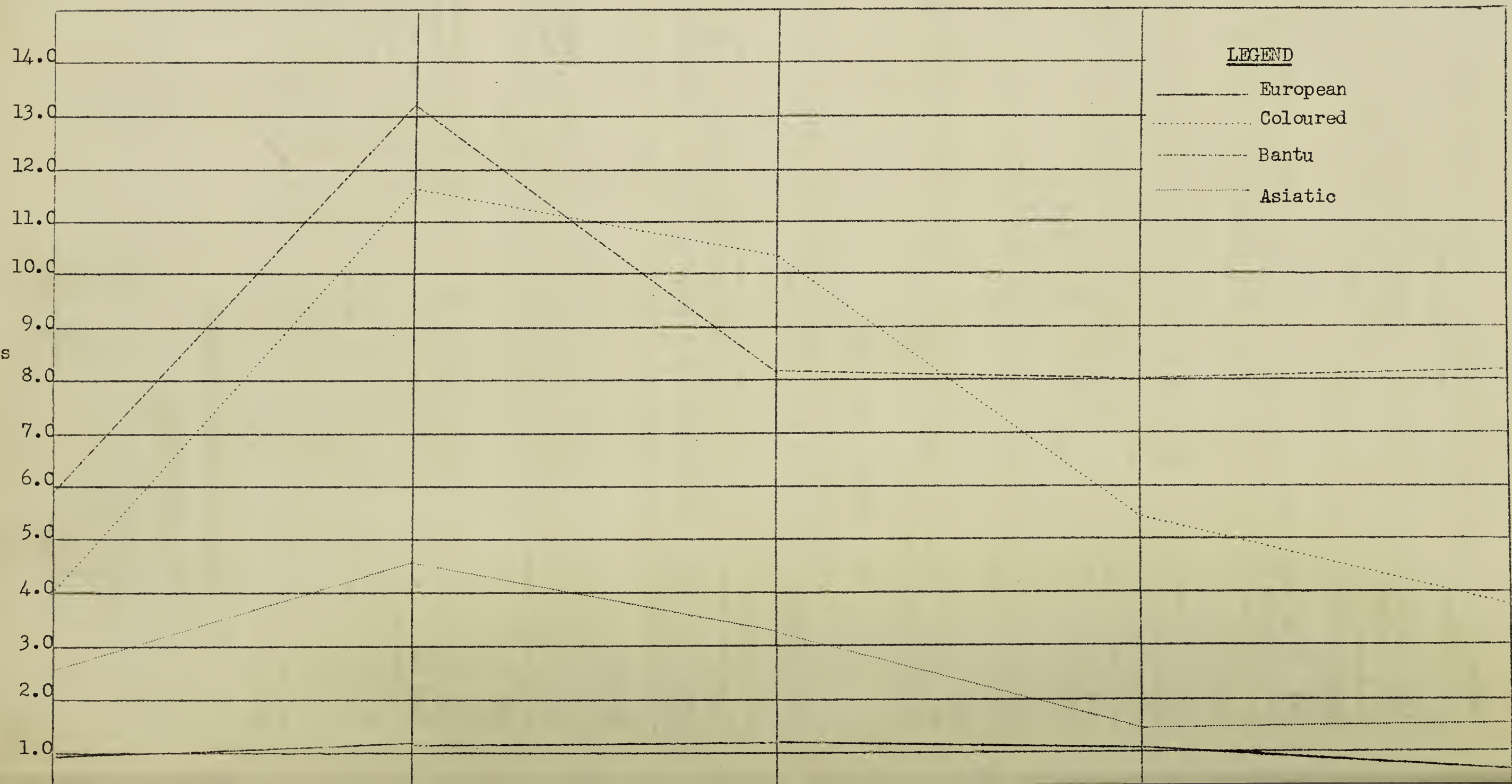
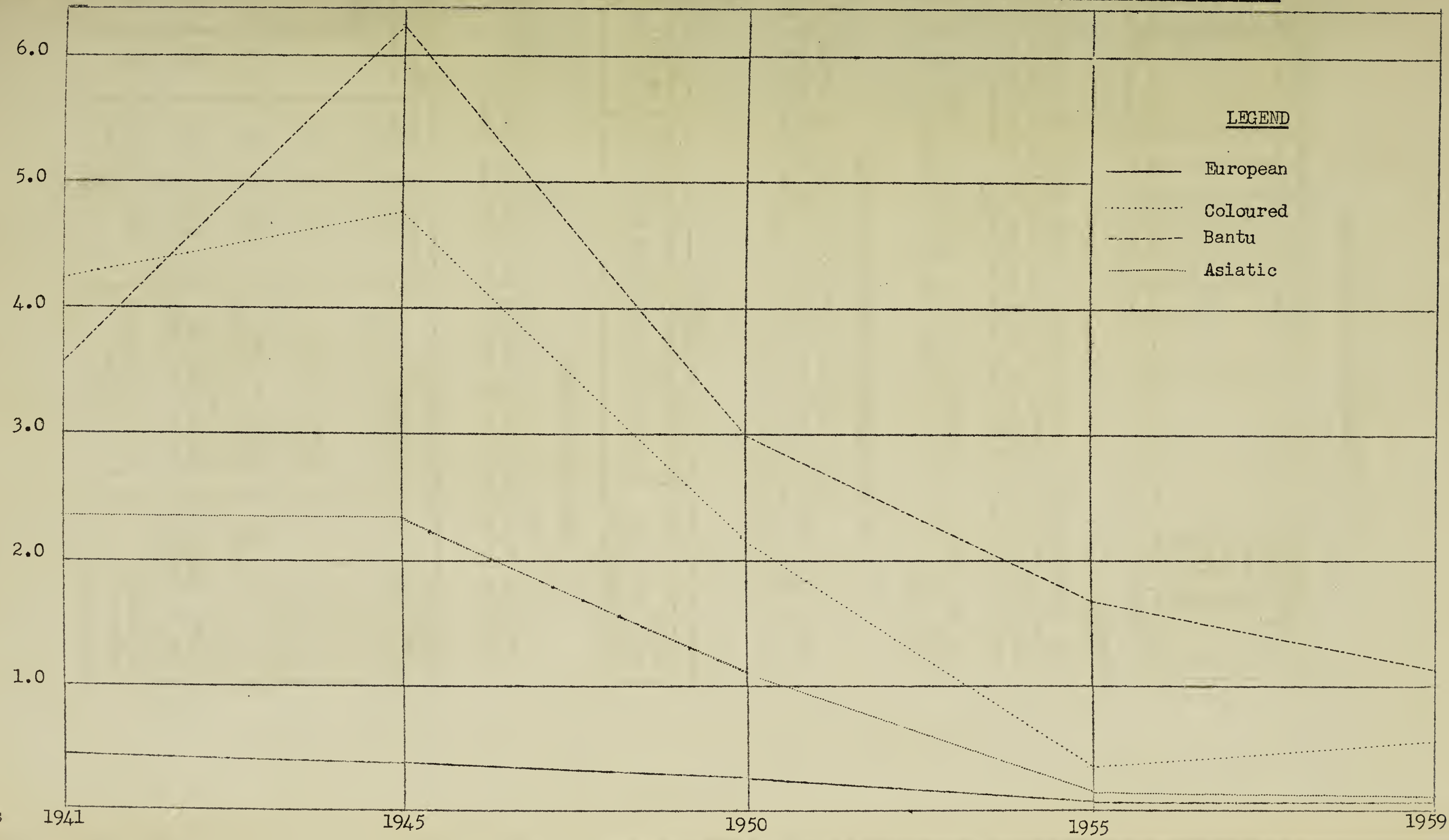
PULMONARY TUBERCULOSIS

NOTIFICATION RATES PER 1,000 HEAD OF POPULATION FOR YEARS
1941, 1945, 1950, 1955 and 1959



DEATH RATES PER 1,000 HEAD OF POPULATION FOR YEARS 1941, 1945, 1950, 1955 and 1959



(b) Notifications in Age Groups

Age Groups	E.	C.	B.	A.	Total
Under 5 years	-	-	9	5	17
5 to 14 years	1	2	6	10	16
14 to 24 years	-	-	18	17	35
24 to 44 years	-	-	42	16	59
44 to 64 years	-	1	16	4	20
Over 64 years	-	-	6	1	7
Total	1	3	97	53	154

Comment

(a) There has been a slight increase in the number of notifications, affecting mainly the Bantu. No obvious explanation is apparent but m well be due to an increase in notifications, as failure to notify thi form of the disease in the past appeared to be not uncommon.

(b) The number of notifications in the pre-school child age is not u high, even in the Bantu, in which race the age group 24 - 44 is the m afflicted.

(c) Non-Pulmonary Tuberculosis Deaths

A slight increase in the total number of deaths from no pulmonary tuberculosis was recorded and a study of the sub-joined tab reveal that the only significant increase was reflected in the Bantu and the corresponding death rate:

	Deaths				
	E.	C.	B.	A.	To
Deaths	1 (2)	3 (2)	61 (54)	14 (16)	79
Death Rate (per 1,000 Population)	0.006(.013)	0.11(0.08)	0.32(0.29)	0.07(0.07)	0.1

3. Hospital Facilities

Set out below is a list of the hospitals and settlemen admitting cases from Durban, showing the beds set aside for cases of pulmonary tuberculosis in respect of the different races:

Hospital/ Settlement	Controlling Authority	Bed Capacity			
		E.	C.	B.	A.
Applesbosch Hospital Kingscliffe	Church of Sweden	Nil	Nil	45	If nec essary
Benedictine Mission Hospital	Roman Catholic Church	Nil	Nil	150	Nil
Catherine Booth Salvation Army Hospital	Salvation Army S.A.Headquarters, Johannesburg	Nil	Nil	9	Nil
Ekuphilisweni Home of Healing	Healing Home of Africa Association	Nil	Nil	87	Nil
F.O.S.A. Settlement Newlands	F.O.S.A. Associa- tion, Durban	Nil	If nec- essary	10	146

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Hospital/ Settlement	Controlling Authority	Bed Capacity				
		E.	C.	B.	A.	Total
King George V Hospital	Secretary for Health (Union Government)	119 (Including Children Mixed Surgical	76	1150	76 183, 87)	1421
McCord Zulu Hospital	McCord Zulu Hospital, Durban	Nil	-	60	-	60
Montebello Mission Hospital	Roman Catholic Church	Nil	Nil	70	Nil	70
St. Appolinaris Mission Hospital Centacow	Roman Catholic Church	2	If necessary	40	If necessary	42
St. Francis Hospital	Roman Catholic Church	2 (No specific allocation for P.T.B.)	If necessary	53	Nil	55
St. Mary's Hospital, Mariannhill	Roman Catholic Church	Nil	-	63	-	63
St. Mary's Hospital, Kwa Magwaza Mission	Anglican Church Zululand	Nil	-	27	Nil	27
S.A.N.T.A. Dunstans Hibberdene	S.A. National Tuberculosis Association, Johannesburg.	Nil	Nil	197	Nil	197
Toc H Settlement Botha's Hill	Toc H T.B. Settlement Committee, Durban	Nil	Nil	117	Nil	137
Umpumulo Mission Hospital Mapumulo	Norwegian Mission Society and Local Hospital Board = Magistrate 2 E. and Hospital Secretary and 2 N. Minister of Religion	Nil	Nil	45	Nil	45
Umlazi Mission Hospital	Anglican Church Natal	Nil	-	60	-	180
Lilleshall, Rosetta	Natal Anti-Tuberculosis Association	26	Nil	Nil	Nil	26

As mentioned in previous annual reports a number of tuberculosis cases are always to be found in General Hospitals such as Addington and King Edward VIII Hospitals. Naturally the General Hospitals endeavour to transfer established cases to the institutions listed as soon a s possible, having regard also to the patient's area of domicile.

Admissions of City cases to the various hospitals during the year totalled 2,611 cases, comprising 165 Europeans, 141 Coloureds, 540 Asiatics and 1,765 Bantu. The number of admissions shows an increase over the previous year, when 2,382 cases were admitted.

Discharges of City cases during the year were made up of 120 Europeans, 101 Coloureds, 389 Asiatics and 1,304 Bantu, a total of 1,914 cases. As was to be expected from the increase in admissions, the number of discharges increased.

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Patients who absconded from hospital, or left against advice numbered 196, comprising 5 Europeans, 13 Coloureds, 39 Asiatics and 139 Bantu. This represents an increase of 3 over the previous year and considered in conjunction with the admissions reflects a slight improvement in the situation, more especially amongst the Bantu where the total is one less than previously.

Comment

All cases discharged from hospital are followed up and every effort is made to ensure that attendance at the clinic is established. In the case of absconders and those leaving against advice particularly energetic steps are taken to secure an early attendance at the clinic as many are sputum positive.

Once again the need for a transit settlement, to which persons could be legally committed and where practical, repatriated to their homes, is apparent and constitutes the only solution to the problem of Bantu who abscond from hospital, refuse admission or seriously misbehave after admission, as well as those who cannot be prevailed upon to attend clinics.

4. Settlements

The need for a Bantu settlement near Durban remains as urgent as ever. Negotiations for a site to the South of Durban have commenced and at the present time the chiefs and local residents of the environs of the proposed site, which is in the Native Reserve, are considering the matter, as without their consent the project cannot be brought to fruition.

5. Field Work and Control Programme

The staff of the City Health Department engaged on tuberculosis control programmes consists of five European Health Visitors, one European Health Inspector, fifteen Bantu and five Asiatic Health Assistants, together with a clerical staff comprising two European Clerks, and two Lady Assistants, all falling under the immediate direction of the Assistant Medical Officer of Health.

General

The administrative changes introduced previously were consolidated and much valuable information is now being recorded. Scope still exists for extension of the scheme to embrace records indicating the stage of the disease when first discovered and the predominant stage amongst contacts.

Statistics of Field Work

The tables below set out the major facets of the field work in racial groups:

Home Visiting

	E.	C.	B.	A.	Total
Initial visits to cases	153	109	3,893	398	4,553
Visits to suspects	35	30	1,902	116	2,083
Re-visits: Cases and Contacts	3,178	2,033	16,687	7,380	29,278
Visits to Defaulters from clinics	464	523	3,963	432	5,382

Contacts

	E.	C.	B.	A.	Total
Contacts referred to Clinics	628	258	5,517	1,834	8,237
Contacts examined at Clinics	381	136	3,755	1,595	4,867
% Contact Attendance	60.6	52.7	48.9	86.9	59%
Suspects examined at Clinics	-	3	316	43	362
Number of cases found amongst contacts	-	6	105	16	127
% of contacts examined, diagnosed as P.T.B.	0%	4.41	3.81	1.00	2.63%

Injections Given

E.	C.	B.	A.	Total
1,115	131	37	2	1,285

6. Home Visiting

Due to pre-planning of the work the number of home visits has increased considerably, a total of 44,128 home visits being carried out, compared with 24,380 in 1957 and 38,182 in 1958. The table on home visiting reflects the main reasons for the visits although a total of 2,832 visits for various unclassified reasons were also made. The number of visits by the European Health Visitors remained virtually unchanged, the Bantu particularly and the Asiatics to a lesser extent having substantially increased their visiting despite the unsettled conditions in the Native locations.

7. Contacts

Contacts referred to clinics represent those persons living or working in reasonably intimate association with cases and on this basis the average number of contacts per case is four.

The percentage contact attendance is most gratifying amongst the Asiatic community, reasonable amongst Europeans, but depressing amongst the Bantu, in spite of every endeavour being made to ensure their attendance. In 1958 some 61% of Bantu contacts attended, and a drop to 48.9% can only be accounted for by the unsettled conditions in Cato Manor during June and the subsequent closure of the clinic in that area.

There is no doubt that if facilities for the examination of contacts amongst the Bantu were available nearer the locations, the contact attendance would improve considerably and this in turn would reduce the visits now paid to defaulters.

8. "Imported" Cases

Amongst the European, Coloured and Asiatic community these cases cause little difficulty as the vast majority attend clinic shortly after arrival and can be cared for thereafter. The Bantu cases, on the contrary, present a problem of some magnitude. The hospitals and clinics in Durban attract a never ending stream of Bantu patients from the furthermost reaches of Natal and even beyond. Many of these patients suffer from tuberculosis and, after initial treatment make their homes in Durban and forget the original purpose of their visit. Those on out-patient treatment frequently default and change their addresses as frequently as their clothing and so reduce case follow-up to an impossibility.

9. Health Education

In addition to the field staff approach to individual cases in regard to the prevention of the spread of the disease, personal hygiene, dietary advice and guidance on the availability of assistance, the Health Education Section of the Department carried out work amongst the non-European sections of the community. A more detailed description of this Section's activities appears elsewhere in the report.

10. King George V Hospital

Durban is indeed fortunate in having this hospital situated within its boundaries and even more so in the ready assistance and co-operation which the Superintendent and his staff extend at all times to this Department.

The following report, embracing the activities of the hospital has been kindly furnished by the Medical Superintendent:

"1. Bedstate (31.12.1959)

European beds	-	119
Coloured beds	-	76
Asiatic beds	-	76
Bantu beds	-	1,150
Total number of beds available	-	1,421

One additional 64 bed Non-European ward is under repair.

The total number of 1,421 beds represents a loss of 17 beds of the European section. This was necessary because of re-organisation of that section. The number of remaining European beds is adequate for the needs of the European community. On the other hand there was a gain of 152 Non-European beds and from 1.2.1960 an additional 156 Non-European beds will become available due to the opening of the new block.

2. Number of Admissions - (1.1.1959 - 31.12.1959)

	E.	C.	B.	A.
Admissions	281	153	321	2,478
Discharges	279	148	310	2,328

Total Admissions - 3,233 all races
Total Discharges - 3,065 all races.

3. Again full use of all available Non-European beds has been made throughout the year with as rapid a turnover of patients as far as practicably possible

The existence of Santa Settlements and Mission Hospitals enables the hospital to utilise a large number of beds for acutely ill Non-European patients, as convalescent and suitable chronic infectious patients are constantly being transferred to those institutions. There is still a great need for an additional tuberculosis settlement in the neighbourhood of Durban, in order that more hospital beds can be utilised for the acutely ill tuberculosis sufferers awaiting admission. These are at present treated under unsuitable home conditions on an ambulant basis. It is now felt that initial intensive hospital treatment following diagnosis will greatly reduce the number of chronic infectious cases brought on by irregular ambulant treatment attendances of the Non-European tuberculosis patients.

4. The demand for European beds has remained stationary since the drop observed up to last year.

It has to be stated with regret that a relatively high number of patients fall into the category of "Chronic Alcoholics" who present a problem of control to the hospital authority and local authority alike. The patients drift in and out of hospital, submit only irregularly to treatment and fall thereby under the equally formidable category of "Chronic Infectious Cases".

The establishment of a suitable institution for the control of this type of patient would be most welcome to all members of the hospital staff and the local authority.

5. Country Work

The whole of Natal and Zululand is covered by Consultants from King George V Hospital who make regular three-monthly visits to every hospital, settlement, District Surgeon and Medical Officer of Health in their areas. There has been an increase in the number of beds in the region available for pulmonary tuberculosis but in spite of this there is a constant demand for beds. Out-patient treatment continues - but the success of this work is hindered by the malnutrition which is widespread in the Bantu population. There are also very few facilities for following-up defaulters and these defaulters are the source of infection.

The mobile X-Ray vans are also occupied constantly during surveys of known and suspected cases in the region.

6. Proposed Building Schemes

With the completion of the new block no further major work schemes are being contemplated, except the provision of additional stores and kitchen facilities. A proposal for the provision of a small number of additional Non-European beds on existing premises is being studied by the Department.

7. The rehabilitation scheme provided for all suitable hospital patients by the Red Cross Rehabilitation Centre and the Occupational Therapist on the hospital staff continues to be most successful and greatly assists in the recovery of the Non-European patients by keeping them content by preventing idleness."

Comment

Unfortunately, at the time of reporting, the Medical Superintendent was unable to furnish detailed statistics and analyses of irregular discharges, re-admissions, average stay in hospital and surgical procedures undertaken.

It is pleasing to note, that of the 3,233 admissions made during the year 1,107 were City cases and comprised 124 Europeans, 95 Coloureds, 232 Asiatics and 656 Bantu. In 1958, of 2,665 admissions only 856 were City cases.

The increase in non-European beds is most gratifying but the need for beds of a settlement type for non-Europeans, especially Bantu, remains pressing. The ideal is in sight however whereby every newly diagnosed active case will have a spell in hospital before commencing out-patient treatment.

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11. Out-patient Services

(a) Durban Chest Clinic

This clinic serves not only Durban cases, but patients from far beyond the limits of the City. The result, inevitably, is that the clinic functions at full capacity throughout the year, the Bantu section being particularly hard-pressed to cope with the volume of patients.

City cases living at a distance from the centre of the town experience considerable difficulty in attending regularly and the need for additional peripheral clinics remains an urgent necessity.

A very close liaison is maintained between this Department and the Clinic, which is controlled by the Union Health Department, and the success of departmental programmes has been due to the whole-hearted co-operation received from the staff at the Clinic.

The Director of the Durban Chest Clinic has kindly furnished the subjoined report in respect of the activities of his unit during 1959.

"There has been no change in diagnostic and treatment services of Tuberculosis over the year. The public and doctors make good use of the facilities offered, viz. X-Ray and consultative advice on chest diseases, tuberculin testing, B.C.G. immunisation and contact control.

Total attendances for X-Rays, 71,422, remains about the same as in the previous year. Tuberculin diagnostic tests increased by 643 to 6,012. Streptomycin injections in the out-patient treatment of tuberculosis increased by 4,145 to 33,860. On two days a week a sister is in attendance from 6 a.m. for injections to patients who are working. Other injections viz. Penicillin used in the differential diagnosis of tubercle and vitamin B complex increased by 891 to 3,086. B.C.G. inoculations increased by 446 to 1,271 and is offered to all negative tuberculis reactors exposed to tubercle.

There is a reduction in overall notifications of tuberculosis made by the clinic, viz.:

Total	1,003	-	Compare	1958	figure	of 1,690
Natives	823	-	"	"	"	" 1,405
Indians	128	-	"	"	"	" 209
Coloureds	10	-	"	"	"	" 41
a Slight increase in Europeans	42	-	"	"	"	" 35

	Europeans	Indians	Coloureds	Natives
Borough	39	97	10	541
Ex-Borough	3	31	-	282
Total	42	128	10	823

The total number of X-Ray plates taken was:

70 m.m.	-	45,076
100 m.m.	-	25,245
Large Plates	-	12,978

Large numbers of our Bantu patients come from outside the Borough of Durban for X-Ray examination. They are hospitalised if found to have extensive tubercle, but often have to be placed on outpatient treatment to await a bed or as a treatment of election. These patients tend to get "lost" probably due to difficulties of accommodation in Durban and they return to the country.

These patients come here unreferred. The advantages of having patients referred by a competent authority is shown by the good liaison established between the clinic and such institutions as the Botha's Hill Health Centre. This unit ensures that treatment advised by the clinic is carried out and defaulters are traced by them.

It is difficult for this clinic to trace country defaulters other than through a referring clinic or local authority.

A list is submitted monthly to the Durban Local authority of all non-European defaulting patients who are on treatment here. The local defaulter rate tends to be high.

The following percentages reflect the number of patients who attended for re-examination in December having been requested to do so on a previous visit in November:

Natives	38%	out of	250
Indians	50%	" "	60
Coloureds	14.3%	" "	7

A monthly return of ex-Borough persons X-Rayed by total number and individual name per local authority is sent to the Medical Superintendent, King George V Hospital."

Diagnostic and Treatment Services

		Europeans	Coloureds	Indians	Bantu	Total
X-RAYS						
Borough	Clinical) Interviews,) 100 mm. and) L.Plates)	2,671	1,081	5,543	11,890	
	Initial) X-Ray) 70 mm.)	7,142	1,292	8,742	13,762	
	Total	9,813	2,373	14,285	25,652	
Ex-Borough	Clinical) Interviews,) 100 mm. and) L.Plates)	645	103	1,921	7,302	
	Initial) X-Ray) 70 mm.)	1,366	70	1,787	6,105	
	Total	2,011	173	3,708	13,407	
Total Attendances		11,824	2,546	17,993	39,059	71,422
NOTIFIED CASES						
Borough		39	10	97	541	
Ex-Borough		3	-	31	282	
	Total	42	10	128	823	1,003
MANTOUX TESTS		1,462	275	1,617	2,658	6,012
STREPTOMYCIN INJECTIONS		1,488	1,416	8,638	22,318	33,860
OTHER INJECTIONS		324	212	884	1,666	3,086
B.C.G.INOCULATIONS		82	51	450	688	1,271

(b) Cato Manor Clinic

Negotiations at the end of 1958 reached the stage where the Durban City Council had requested the Union Health Department to continue operating this clinic until such time as the findings of the Borckenhagen Commission became known. However, early in 1959 the Union Health Department re-iterated that it was not prepared to purchase the clinic or accept liability for the rental and that the responsibility for conducting the clinic, including the provision of staff and equipment rested with the Council, all expenditure being subject to the relevant part-refund. Notice was then given that the Union Government would discontinue the service at the end of March. Representations requesting a secondment of staff and equipment for a further three months to enable the Council to recruit staff and purchase equipment were favourably received by the Union Health Department. The establishment of the City Health Department was accordingly amended and staff were about to be recruited, when on the 18th June, rioting broke out at Cato Manor and the clinic building was extensively damaged. Thereafter the area became unsafe for medical and nursing personnel and all idea of repairing the building and continuing the clinic inside Cato Manor had to be abandoned.

A search was made for fresh premises on the periphery of this location in which to re-establish the clinic.

Finally, a proposal to convert the Child Welfare Clinic near Cato Manor to accommodate a T.B. clinic and V.D. clinic and the Child Welfare Clinic was submitted to the Union Government together with the relevant plans and estimates of costs. A reply is still awaited.

The abandonment of this clinic service, whilst absolutely essential in the interests of staff safety and to prevent loss or damage to valuable equipment by irresponsible elements, represented a tragic curtailment of a most valuable and essential service.

Patients from Cato Manor and neighbouring areas are now obliged to attend the Durban Chest Clinic, in the centre of the City. Fortunately records of patients were saved and for those who subsequently attended, continuity of treatment was preserved.

Apart from the treatment of patients, this clinic performed a considerable service in case finding and the decrease in 1959, of Bantu notifications, must to some extent have been influenced by the loss of this service.

The work performed at this clinic is discussed in the report set out below, which is furnished by the Director of the Durban Chest Clinic, under whose immediate jurisdiction the clinic functioned to the time of its abandonment:

"This clinic continued to function up to 18th June of the year when activities were stopped as a result of the riots, which occurred in Cato Manor when some damage was done to the building. About this time the City Health Department were arranging to take over the clinic.

This clinic started as a mobile clinic in 1955 and later moved into a disused shop. It offered a complete X-Ray and treatment service based on 70 mm. The set up was simple, and the convenience to the Native population of having a clinic in their location was associated with good clinical results and attendance for treatment - in particular contact tracing.

The following figures reflect the size of the work:

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X-RAYS	
Follow-up Cases	1,686
New Cases	3,306
Total Attendances	4,992
MANTOUX TESTS	1,182
STREPTOMYCIN INJECTIONS	5,177
B.C.G.INOCULATIONS	478
OTHER INJECTIONS	817
NOTIFIED CASES	
Borough	88
Ex-Borough	28
TOTAL	116

Since the closing of the Cato Manor Clinic some patients have come here and have been seen on Cato Manor files which have been maintained as a separate entity. As was expected, many Cato Manor patients have been "lost" as a result of the move."

Statistics of patients from Cato Manor attending the Durban Chest Clinic from July to the 31st December, 1959 are not reflected in the report of the Durban Chest Clinic and are set out below:

X-Rays	Streptomycin Injections	Other Injections	Mantoux Tests	B.C.G.
627	1,114	126	56	5

(c) Mobile Mass X-Ray Industrial Service

This section is operated by the Union Department of Health and is conducted from the Durban Chest Clinic. It provides an excellent service within the confines of the City, dealing with the staff of industrial and commercial concerns. During the year the section undertook 85 industrial surveys in Durban, X-Raying some 30,130 persons, the recalls subsequently being fully investigated at the Durban Chest Clinic. The staff and inmates of the prisons and gaols were X-Rayed and follow-up clinics were conducted in conjunction with the District Surgeon - over 2,500 X-Rays being taken.

A close liaison with factory medical staffs was maintained and more than 2,000 persons attended special industrial clinics held on Wednesday and Saturday mornings. It is noteworthy that 14 factories have full-time trained nursing personnel who carry out streptomycin injections and supervise the taking of various tablets and mixtures prescribed. A study of the detailed results of the Industrial Survey reveals the following points of interest:

(i) Professional Group: Of 34 persons X-Rayed none were found to suffer from tuberculosis.

(ii) Clerical Group: Of 2,671 persons X-Rayed 17 were found to suffer from pulmonary tuberculosis - an incidence of 0.63%

(iii) Skilled Workers: Of 12,660 persons X-Rayed 104 positive cases were found - an incidence of 0.8%, which is slightly lower than in 1958 (0.95%).

(iv) Labourers: 11,712 persons were X-Rayed and 158 cases were found - an incidence of 1.34%, which is slightly higher than in 1958 (1.07%);

(v) Domestic Employment: Six cases were found amongst 580 persons X-Rayed, resulting in an incidence of 1.03%;

(vi) Agricultural And Miscellaneous Employment: The numbers X-Rayed were so low as to be of little significance.

(vii) General: The overall incidence rate was 1.03% which is slightly higher than in 1958, but lower than in 1957. In racial groups, and in all occupations, 0.61% of the Europeans were found to have the disease, 0.5% of the Coloureds, which is much lower than in 1958 when the rate was 1.54%; amongst the Asiatics 0.55% positive cases were found whilst in the case of the Bantu, the rate rose slightly from 1.05% to 1.36%.

(d) B.C.G.Vaccination

(i) Magazine Barracks

The Durban Chest Clinic continued a long term survey of this community and furnished the following report:

"The year 1959 is the third of the Survey being carried out in the Magazine Barracks. This year's survey has been disappointing in its response from the Magazine Barracks residents and the survey is to be repeated in 1960, i.e.: X-Ray, Mantoux testing and B.C.G. negative reactors, and treatment of active cases.

The survey was carried out in the months of October and November, 1959 - but the response was poor. Of a total population of over 5,000 people only 3,319 were X-Rayed despite the fact that the X-Ray Unit worked two nights a week from 7 - 10 p.m. in an attempt of getting in the workers.

Of the 3,319 cases X-Rayed, 41 were recalled for large plates and of these 13 proved to have pathological change. Eight of these 13 cases had suspicious root shadows, of these 6 were children under 14 years of age - none had had B.C.G. and the remaining 2 adults had healed calcified lesions.

The remaining 5 cases had non-Tuberculous pathology.

The survey is scheduled to take place again next year in July and August with X-Ray, Mantoux Testing of all persons in the Barracks and the B.C.G. Vaccination of negative reactors."

(ii) Apart from the vaccinations carried out at the Durban Chest Clinic and the Cato Manor Clinics, B.C.G. vaccinations of new born babies is carried out at two of the larger hospitals in Durban, but statistics were not available at the time of reporting.

(e) Institute of Family and Community Health

This Provincial institution functions in the Merebank and Lamontville areas of Durban. The Head of the Institute has kindly furnished the subjoined report on the work of the Institute in regard to tuberculosis in these two areas:

"(i) The incidence rate of new cases of pulmonary tuberculosis were as follows:

		1956	1957	1958	1959
Merebank	- Indian	2.5	.67	1.2	1.04
	- Coloured	3.8	-	-	-
	- African	25.3	6.4	12.1	6.0
Lamont	- African	7.5	5.5	4.2	4.3

The death rate from all forms of tuberculosis for 1959 was .69 per thousand population. The death rate for 1958 was .77.

No deaths of known residents were notified for the Merebank communities during 1959.

(ii) Treatment of Cases Living outside Merebank and Lamont

The Durban Chest Clinic refers cases to the Institute from areas adjacent to the areas served by the Institute, such as Jacobs,

Umlazi, S.J.Smith Hostel and those employed at the Mobeni factories but living elsewhere, for further treatment.

26 outside cases were thus treated during the year in 525 attendances.

(iii) No. of X-Rays done at the Institute during 1959

Areas	No. done Chest	No. with Abnormalities
Lamontville (African)	355	97
Merebank (Indian)	102	14
Merebank (Coloured)	12	1
Merebank (African)	-	-
Woodlands (African)	2	-
European Staff	6	-
Total	477	112

The above abnormalities were not necessarily due to T.B."

(f) Springfield Health Centre

Excellent work continued to be performed by the staff of King George V Hospital from this small unit, which carries out an intensive programme in the Durban Housing Scheme at Springfield.

12. Supplementary Feeding of Indigent Tuberculosis Cases

Early in the year the City Council accepted the principle of supplementary feeding as an integral part of tuberculosis prevention, and a sum of £2,000 was set aside for this purpose.

A proposal which envisaged that the State Food Scheme should provide rations to patients on vouchers issued by this Department received approval from the necessary authorities, but before the plan could be put into operation the State Food Scheme was transferred to the Department of Agricultural Economics and Marketing and finally abandoned.

A fresh proposal utilising the services of the Natal Anti-Tuberculosis Association was contemplated but finality has yet to be reached. It is however anticipated that the issue of rations to needy tuberculosis out-patients will commence early in the new year.

13. Recovery of Hospital Fees

No change has occurred in this matter and all cases hospitalised are investigated and the particulars of the financial state of the patient recorded. When necessary, patients are required to attend for almoning. Needless to say few patients are able to contribute more than token amounts towards the costs of this hospitalisation.

14. Domiciliary Assistance

In addition to Government Disability and Maintenance Grants, financial assistance is given to patients of all races by the Natal Anti-Tuberculosis Association. In addition Indian patients are helped by the Friends of the Sick Association.

This Department's Health Visitors and Health Assistants tender material aid in this respect, firstly in investigating the patients' financial disabilities and reporting thereon, secondly in directing them to the authority most likely to be of assistance, and finally in ensuring that the best use is made of such assistance.

Set out below is an extract from the Annual Report of the Natal Anti-Tuberculosis Care Committee, kindly furnished by the Secretary:

"T.B. Research

Progress against T.B., or for that matter any other disease, is founded on scientific research and is not made by the genius of a few but by the faith and work of many. Research at the King George V Hospital for Tuberculosis in Durban is assiduously carried on under the direction of Dr. B.A.Dormer, the Medical Superintendent, and one of the latest successes of this research has recently been made public.

Infants are the most susceptible of all to tuberculosis and faced with a high mortality rate of children born in the hospital, an endeavour was made to see whether it was possible to overcome this by the use of isoniazid as a prophylactic for newborn babes. As the result of this research, a child instead of being separated from the mother is kept beside the mother and breast feeding is the rule for those able to care for their infants. In all cases where isoniazid has been given to the children, it has completely prevented tuberculosis in the children. This is an advance worthy of special note.

Supplementary Feeding of Persons Suffering from T.B.

Previous reports have emphasised that it is useless treating a patient with drugs unless that patient has sufficient food to build up resistance to the disease. In other words, food is as much a necessity as drugs, and it is a fact that many of those who receive domiciliary treatment at the Durban Chest Clinic do not have enough food of the right type to eat. To counter this the Union Health Department about five years ago, introduced a scheme for the supplementary feeding of persons receiving domiciliary treatment whereby a Local Authority could undertake such feeding on the basis of receiving a refund of seven-eighths of the cost from the Union Health Department.

Following the receipt of the circular concerning this scheme in 1955, the Association took the matter up with the City Council who in turn pursued the subject with the Union Health Department. Various difficulties in connection with administrative costs and obligations of a local authority were encountered, and in an attempt to solve the difficulty, the Association offered to administer the scheme provided the Council purchases the foodstuffs. By this time the City Council had approved the scheme in principle and an amount of £2,000 had been set aside for the purpose. A proposal to enlist the services of the State Food Department fell through owing to the closing of the depot and the Association then repeated its offer of administrative assistance."

Conclusion

Once again it is necessary to report that a huge volume of work is necessary to control tuberculosis in Durban and that without the provision of additional clinics, progress is materially hampered.

Whilst the acceptance by the Council of the principle of supplementary feeding for indigent tuberculosis patients is a further note of progress in the year's work it must be mentioned that the disorderliness occurring amongst the Bantu population has adversely affected control of the disease amongst this racial group of the community.

The need of additional hospital or preferably settlement beds for the Bantu patients remains urgent but a guarded note of optimism can be sounded for the New Year.

V. VENEREAL DISEASES

A. Introduction

The figures available comprise only those patients treated in the Municipal non-European Clinics and the European and Coloured Clinic at Addington Hospital. There is no record of those cases treated by District Surgeons, private practitioners and institutions treating venereal diseases patients who are not required to make any return to the local authority. The overall incidence in the City is therefore somewhat higher than the statistics available would suggest.

Early in the year the Senior Clinical Medical Officer (City Venereologist) left the Council's service. By the end of the year the vacancy had not been filled, and the willing co-operation of all members of the staff in shouldering the extra burden of work was in the highest tradition of this Department.

Although a locum tenens was engaged for short periods weekly during the year to assist in the clinical work, the low rate of remuneration (approximately 10/6d. per hour) allowed by the Union Department of Health virtually made this assistance an act of charity. The Union Health Department has been approached with a view to amending the scales to a basis more acceptable to the medical profession.

B. New Cases

The total number of new cases attending clinics in the City was 12,391, which is a decrease of 909 over 1958.

(a) Europeans: City new cases increased by 28, and imported cases by 69. In both groups by far the greater number seen were males.

(b) Coloureds: City new cases showed an increase of 29 and imported cases increased by 6, again males greatly predominated the attendances.

(c) Asiatics: Here again an increase in City cases was noted, (44), whilst a slight decrease was recorded in imported cases.

(d) Bantu: In this racial group City cases showed a drop of 907 new cases and 149 imported cases. The disparity of attendances between the sexes in this racial group is much less marked than in other races. Following the unsettled conditions at Cato Manor in June, attendances of new cases at that Clinic dropped to almost half the usual figure and only in the last quarter of the year was an upward trend noted.

C. Outpatient Attendances

With the fall off in new cases the outpatient attendances decreased, as was to be expected, some 44,412 attendances being recorded

as against 46,526 in 1958. Here again the riots in June had a marked effect on the attendances at the Cato Manor Clinic.

D. Ward Admissions

A corresponding decrease is noted under this heading, some 1,422 cases being admitted in 1958 as against 1,252 this year.

E. Clinical Services

Sessions for European and Coloured cases totalling 10 hours week were held at the Addington Hospital and the work was done on behalf of the Municipality by Provincial staff. During the year various negotiations were conducted between the Provincial and Municipal authorities in relation to costs per capita. In all, 302 sessions were held at this clinic during the year.

Asiatic and Bantu patients received attention at the Congella and Cato Manor Municipal clinics, at which some 639 sessions were held. The Congella Clinic functioned daily with the exception of Sundays and Public Holidays, whilst the Cato Manor Clinic was held on two mornings weekly, for approximately 3 hours at each session.

No clinic was established during the year at kwaMashu, but the need for such a service became more urgent.

F. Ante-natal Clinics

Routine blood tests for the detection of syphilis continued to be taken at ante-natal clinics in the City and positive cases were referred to the special clinics for further investigation and, if necessary, treatment.

G. Staff

Apart from the lack of a Senior Clinical Medical Officer during the greater part of the year, one of the Bantu trained staff left the service and no replacement was obtained.

H. Contact Tracing

This was maintained during the year, the work amongst the Europeans being very limited. Amongst the Bantu and Asiatics this was done by the Health Assistants of the Tuberculosis Section. Unfortunately, but not surprisingly, the success of contact tracing was small, many cases giving false contacts and addresses while on occasion it appeared that false information was maliciously given.

I. Health Education

This was continued throughout the year by the Health Assistants and the Health Education Section.

J. Economy and Efficiency Survey

A complete and thorough investigation was carried out in this section toward the latter part of the year but by no means all of the recommendations could be implemented before the year end, especially those having far reaching effects and those dealing with expansion of the service. However, the administrative section was 'streamlined' and all duplication of records eliminated.

K. General

(i) Continued co-operation on a high level has been maintained with the various hospitals, private practitioners and pathological laboratories:
(ii) Lymphogranuloma inguinale cases diagnosed in Durban still serve as a reservoir for pus for the making of antigen for the 'Frei Test' at the South African Institute of Medical Research in Johannesburg:
(iii) Once again it must be noted that, as in other facets of public health work amongst the Bantu, services were interrupted to some extent by the unruly behaviour occurring amongst this racial group at Cato Manor.

L. Statistics

Set out below are tables reflecting the analysis of venereal diseases treated and a general summary of the work done by this section.

ANALYSIS OF VENEREAL DISEASE CASES AMONG NON-EUROPEANS TREATED IN 1959

Diagnosis	New Cases		Attendances (All cases)	
	Male	Female	Male	Female
1. Seronegative Primary S.	175	1	479	8
2. Seropositive Primary S.	92	10	638	73
3. Secondary S.	55	88	238	522
4. Tertiary S. - clinically recognisable	4	-	7	-
5. Latent (diagnosed on result of serological test alone)	62	88	1,179	1,160
6. Neurosyphilis	-	-	13	-
7. Congenital S. under 1 year	6	9	34	36
8. Congenital S. over 1 year	1	2	77	20
Total Syphilis	395	198	2,666	1,817
9. Gonorrhoea	3,226	2,847	11,406	10,167
10. G.C.Vulvovaginitis	-	11	11	9
11. G.C.Ophthalmia	6	19	48	67
Total G.C.Infections	3,232	2,877	11,465	10,243
12. Ulcus Molle	516	23	1,813	63
13. Lymphogranuloma Venereum	7	-	29	1
14. Granuloma Inguinale	1	-	5	1
15. Venereal Warts	251	55	1,236	245
16. Non Specific Urethritis	243	160	937	836
17. Non Venereal	1,753	954	7,112	4,681
Grand Total	6,398	4,267	25,263	17,887

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VENEREAL DISEASES

STATISTICAL SUMMARY

1959

	European				Coloured				Bantu				Asiatic				Totals				Grand Total
	City		Imported		City		Imported		City		Imported		City		Imported		City		Imported		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
New Cases	229	46	275	5	186	92	54	5	5248	3493	1045	940	471	222	55	35	6134	3853	1429	985	12391
Ward Admissions									415	374	199	227	21	14	2		436	388	201	227	1252
Out-patient Attendances	811	214	620	15	815	539	147	9	19008	13189	3701	3145	1197	748	138	116	21831	14690	4606	3285	44412

RATE OF NEW CASES PER 1,000 POPULATION (CITY CASES ONLY)

	European	Coloured	Bantu	Asiatic	All Races
1959	1.74	10.62	45.40	3.24	16.92
Number of Sessions	302		639		941

VI. IMMUNISATION

One of the most important services carried out by the Department is the immunisation of the community against infectious diseases. This service was steadily maintained throughout the year in all areas with the exception of the Cato Manor area where it was temporarily interrupted by the riots in June.

The Department's campaign, as in the past, has been organised along three main lines of attack:

(a) Immunisation at child health clinics. During the year this service has been extended. It is felt that ideally all immunisation in infancy should be done in conjunction with such clinics;

(b) Mass campaigns in thickly populated areas, particularly in regard to the non-European sections. To this end the mobile clinic van was sent to such areas as a base for operations. Large numbers of these sections received immunisation in this way against smallpox, diphtheria and poliomyelitis;

(c) Schools immunisation programmes. These are concerned with immunity against diphtheria and tetanus, and embrace Government and private schools of all race groups.

On the whole there has been a good response on the part of parents to immunisation appeals. The numbers of persons immunised against the various diseases reflect a considerable increase on those for the previous year. Special attention has been given to diphtheria. The polio vaccination campaign has gone forward with increasing momentum. During the year a point was made of encouraging adults up to the age of 45 to be immunised and this campaign met with considerable success.

Diphtheria - Tetanus Vaccine

The combined diphtheria-tetanus vaccine prepared by the South African Institute for Medical Research was introduced into the Department's vaccination programmes. Since 1957 the Department has been using combined diphtheria-whooping cough-tetanus vaccine as a routine in the immuniaation of infants. In the schools programme plain diphtheria vaccine (P.T.A.P.) was used as a booster.

It was decided during the year to endeavour to maintain the immunity against tetanus as well as against diphtheria by administering the "dip-tet" product at school-going age. This will be an effective procedure only when the generation of children who have received combined vaccine (D.W.T.) in childhood reach school-age. There will be, in diminishing numbers, however, a group of school children who have had no tetanus immunisation in infancy. It was decided to attempt to create a measure of immunity amongst these children by giving them a course of "dip-tet" injections, and this procedure was started in December, 1959. A special "dip-tet" containing 5 Lf diphtheria toxoid and 6 Lf tetanus toxoid per .5 ml was prepared for the Department through the co-operation and courtesy of Dr. J.H.Mason of the South African Institute for Medical Research.

Routine Procedure for Immunisation

This was revised during the year, and the plan of action is now as follows:

Age	Type of Immunisation
(1) At 3 months	Vaccination against smallpox.
(2) At 4 - 6 months	Combined diphtheria-whooping cough - tetanus vaccine. 3 injections at intervals of 4 weeks.
(3) At 7 months	1st poliomyelitis injection.
(4) At 8 - 9 months	2nd poliomyelitis injection (interval of 6 weeks).
(5) At 9 - 13 months	Revaccination when not successful.
(6) At 14 months	3rd poliomyelitis injection (7 months after 2nd injection).
(7) At 26 months	4th poliomyelitis injection (1 year after 3rd injection).
(8) At 6 years	Booster against diphtheria and tetanus.
(9) At 9 years	Booster tetanus.

Typhoid Control

Owing to the increased prevalence of typhoid fever in the Cato Manor area, early in the year, the Department intensified its immunisation measures agai the disease in that locality. All means of propaganda were employed by the Depart ment to encourage the inhabitants to seek protection against the disease. In addition a request was made to the Chambers of Industries and Commerce requesting that a paragraph be included in their weekly newsletter to the effect that the Department recommended that all Bantu industrial and commercial workers residing at Cato Manor should be immunised against typhoid fever.

There was a steady response from the residents as regards the first injections but, unfortunately, only a proportion of the subjects inoculated return for their second injection.

Food-Handler Clinics

In addition to the above sessions, clinics were held twice a week, when selected groups of food-handlers were vi-tested and immunised against typhoid Those vi-tested comprised 84 Europeans, 59 Coloureds, 1,909 Bantu and 158 Asiatics

Poliomyelitis Control

Immunisation against poliomyelitis was carried out routinely on thre days a week at the Gale Street Clinic. In addition to these clinic sessions, fiel sessions were held in a number of non-European areas making use of the mobile clin van.

In April, 1959 a circular was received from the Department of Health on the latest trends in the incidence of poliomyelitis in the Union. The circular also stated that the Department considered it desirable that a fourth inoculation of the vaccine should be given a year or longer after the third injection. This suggestion was adopted, but only a small percentage of the community has applied for the 4th injection.

Smallpox Control

Vaccination against smallpox was carried out at a number of child health clinics, throughout the year. The mobile immunisation van visited all congested areas in the City at regular intervals in an endeavour to raise the vaccination state of the community. In most areas this is satisfactory. In Cato Manor however there is no room for complacency. After the riots in June it became virtually impossible for immunisation to be carried out and the Department had towards the end of the year under consideration the training of Bantu staff to carry out this important work.

Statistics

Diphtheria

(By City Health Department)

	E.	C.	B.	A.	Total
1st Injection	1,883	411	1,189	841	4,324
2nd Injection	1,603	395	577	649	3,224
Booster	2,133	190	3	5,452	7,778
Total	5,619	996	1,769	6,942	15,326

(By Institute of Family and Community Health)

1st Injection	-	1	127	10	138
2nd Injection	-	1	94	6	101
Booster	-	-	8	2	10
Total	-	2	229	18	249

Combined Diphtheria, Whooping Cough and Tetanus

(By City Health Department)

1st Injection	2,456	1,074	2,853	5,983	12,366
2nd Injection	2,162	976	1,583	4,495	9,216
3rd Injection	2,015	860	1,156	3,354	7,385
Booster	112	177	2	331	622
Total	6,745	3,087	5,594	14,163	29,589

(By Institute of Family and Community Health)

1st Injection	-	33	601	168	802
2nd Injection	-	9	329	77	415
3rd Injection	-	8	217	42	267
Booster	-	-	21	24	45
Total	-	50	1,168	311	1,529

Typhoid

(By City Health Department)

1st Injection	441	165	15,770	2,184	18,560
2nd Injection	249	198	9,964	1,493	11,904
Boosters	19	-	697	48	764
Total	709	363	26,431	3,725	31,228

(By Institute of Family and Community Health)

1st Injection	-	13	240	464	717
2nd Injection	-	19	403	183	605
Boosters	-	2	4	2	8
Total	-	34	647	649	1,330

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Poliomyelitis

(By City Health Department)

	E.	C.	B.	A.	Total
1st Injection	4,615	912	2,472	1,291	9,29(
2nd Injection	4,497	881	1,539	330	7,24[illegible]
3rd Injection	5,934	335	107	202	6,57[illegible]
4th Injection	936	1	1	-	93[illegible]
Total	15,982	2,129	4,119	1,823	24,05[illegible]

(By Institute of Family and Community Health)

1st Injection	-	51	2,507	1,911	4,46[illegible]
2nd Injection	2	26	1,132	826	1,98[illegible]
3rd Injection	1	-	20	8	2[illegible]
4th Injection	-	-	37	3	4[illegible]
Total	3	77	3,696	2,748	6,52[illegible]

Smallpox Vaccination

E.	C.	B.	A.	Total
1,944	1,142	2,574	11,606	17,266

Set out below is a list of vaccinations carried out by Government and Provincial authorities and the Municipal Bantu Administration Department:

Institute of Family and Community Health	131
Port Health Officer	987
Municipal Bantu Administration Department	92,326
District Surgeon	3,594
Total	97,038

Medical Examination of Bantu Seeking Registration

The Medical Officer, Municipal Bantu Administration Department, has kindly submitted the following report in regard to the above service carried out by his Department.

"Total number of Bantu examined was 97,094 consisting of 82,249 adults and 15,845 juveniles.

The figures for the previous year were 113,424 of which 96,220 were adults and 17,204 juveniles.

The number of Bantu referred to hospital for investigation and treatment was 2,582. Of these venereal disease accounted for 1,470 and bilharzia 741. Tuberculosis accounted for 148, of which it is estimated that 50% had active tuberculosis. There were 149 cases of scabies.

A total of 92,316 vaccinations were performed, and as far as is known, without ill effects."

VII HEALTH INSPECTION AND SANITATION

Despite difficulties due to shortage of staff environmental health control has been well maintained. For purposes of health inspection the City is split up into 31 districts. These districts are grouped into divisions, each under the control of a Senior Health Inspector. At no time in the year has there been a full complement of district Health Inspectors. In consequence a number of Inspectors have been burdened with two or more districts. Nevertheless the usual programmes of routine inspections, food-handling investigation, complaint investigation and trading licences work have continued undiminished.

Some of the outstanding features in the year's work are recorded below.

Early Morning Inspections:

On one day each week throughout the year, an Inspector was detailed to carry out inspections between the hours of 5 and 8 o'clock in the morning. Food-handling premises, laundries, milk, bread and meat handling vehicles received particular attention. Where warranted suitable action was taken.

Various contraventions of the By-laws of the City, including employees sleeping in the kitchen of a cafe, the exposure of bread and other foodstuffs to contamination by dust and flies, food-handlers being improperly clad, and the illegal keeping of animals on food-handling premises were brought to light.

Several prosecutions were brought against offenders and the value of this type of inspection was confirmed.

Handling of Meat in Transit

Attention was paid to meat delivery vehicles. Vehicles leaving the Abattoir were kept under observation until final deliveries to retail butcheries and other points were made.

Certain unsatisfactory features including inadequate or unsatisfactory covering, and malpractices on the part of vehicle crews were noted. In these cases legal proceedings were instituted and fines recovered.

Survey of Food-Handling Premises

A system of surveying all food-premises and recording all relevant details on a special schedule was commenced at the beginning of the year. As the year progressed, however, it was considered advisable to "revise" the schedule and bring a new system into use. This was done, and the method now adopted ensures (a) that no establishment can be overlooked and (b) that every establishment will receive attention at least once during each year.

As a matter of interest 9,854 premises are to be thus attended to. Of this total nearly half are Asiatic traders. Premises include all types of food-handling businesses together with clubs, schools and charitable and other institutions where food is dispensed. The number is growing and will undoubtedly continue to grow steadily.

Together with the Health Education Section, the health inspectional staff gave talks to food-handlers in hotels and restaurants. In this way it was hoped to impress upon waiters, chefs and other food-handlers the responsibilities they have to the public in regard to clean food. Furthermore,

scullery staff were instructed in the correct methods of dishwashing and the proper use of equipment, the installation of which has been insisted upon by this Department. This programme was continued throughout the year.

Arising from complaints in respect of conditions in certain of the beach catering establishments a survey was made of all premises on the North and South Beaches. Generally speaking there has been an improvement within these premises. In two cases notices were served and followed up in due course.

In one instance it was necessary to carry out an inspection outside of normal duty hours. Conditions, however, from a cleanliness point of view were satisfactory.

In addition to the foregoing, Health Inspectors mingled with the public on the beach sands and observed the manner in which food and drinks were being served outside the respective premises. The condition of waiters' clothing was also investigated. With very few exceptions the condition and cleanliness of waiters' clothing was good and various forms of protection and covering were used in respect of foodstuffs and drinks.

Improvements to Food Premises

Under pressure from this Department, the unsatisfactory kitchen and scullery accommodation of a long established private hotel was enlarged and completely renovated. Also under departmental pressure several inferior shops were demolished.

Objections to Renewal of Licences for 1960

Hearings concerning five sub-standard food shops were conducted by the Licensing Department. The results in three of the hearings were as follows:

(1) A very inferior restaurant was completely renovated and modernised to conform with Departmental standards;
(2) In ine case licences were surrendered;
(3) Objections to renewal of licences for 1960 was sustained.

In connection with an objection lodged to renewal of licence for a private hotel, the City Licensing Officer granted licence for 1960 but warned applicants regarding further renewals. He urged applicants to comply with health requirements within the year.

A hearing regarding a very inferior laundry has yet to be concluded.

Pre-cut and Pre-packed Meat

The retailing of pre-cut and pre-packed meat was introduced during the year. Cutting up, and packing of meat in transparent plastic containers is carried out in approved premises. All operations, including transport to the retailer, are done at "chill" temperature. During exposure for sale, packaged meat is kept in properly designed chilling cabinets. Inspections from time to time show that containers satisfactorily withstand handling by customers in selecting their individual requirements.

Vinegar

A complaint brought to light the presence on the market of "eel" infested venegar. This organism was found to be a nematode known as

the "vinegar eel". The infested vinegar was pin-pointed to one bottling and blending factory in Durban. Tests showed that bulk supplies to this plant were not infested and that the trouble arose locally. Full combative measures to eliminate this trouble were exercised by the firm concerned and this Department gave all advice and assistance possible.

Lectures

Following a request by the Toc H Lunch Forum a member of the Department gave a talk on "Some Interesting Aspects of Public Health". This lecture gave an outline of the history of public health legislation, leading up to the passing of the Public Health Act in South Africa. The various branches and functions of this Department were dealt with in order to give a clear picture of what constitutes a modern Public Health Department.

Unsatisfactory Sewerage Conditions

Several instances of unsatisfactory sewerage or drainage conditions were reported to the Department and investigated, and the appropriate action taken.

Flood Damage

In May heavy and sustained rainfall resulted in flood conditions in the Southern areas of the City. The sewage-pumping station in Matwebula Road was submerged and pumps and electric motors damaged. In consequence the sewerage service from 700 houses was disrupted and this Department foresaw the danger of a possible outbreak of typhoid fever.

All possible preventive measures, including health educational lectures, immunisation, and treatment of exposed sewage, were undertaken.

It is pleasing to record that conditions were expeditiously brought back to normal by the splendid efforts made by members of the staff of the City Engineer and City Electrical Engineer. In this connection, the Department wishes to place on record its high appreciation of the valuable and meritorious services of the employees who were engaged continuously, day and night, in clearing the pumps and the electrical installations. A close watch is being maintained over the area where pollution occurred.

The bursting of the Umlaas Canal wall for a distance of 200 yards caused flooding of the low-lying area of Merebank and 45 families - mainly evacuated persons took refuge in the Merebank Government School.

Voluntary organisations such as the Red Cross Society and the St. John Ambulance Association and Brigade catered for the needs of the displaced persons. Within 7 days all the families returned to their homes.

This Department ensured that daily refuse removal and cleansing services were introduced.

After the floods had receded, the Union Department of Social Welfare conducted a thorough survey of all damage in the Merebank and Sea Cow Lake areas. This survey was concerned with the rendering of assistance to persons who suffered losses when the Umlaas Canal wall collapsed and the Umgeni River overflowed its banks.

This Department co-operated fully in assessing damage, locating sub-divisions and arranging for drainage canals.

The Chairman of the Natal Flood Relief Committee has paid tribute to the valuable assistance rendered to his Committee by officials of this Department, stemming from intimate knowledge of the localities concerned.

Cato Manor

In the early stages of the year it became obvious that conditions, generally had undergone serious deterioration.

Unsatisfactory conditions were brought about, or augmented by (a) absence of water-borne sanitation in parts and the use of open pit latrines, (b) complete absence of waste water drainage other than at ablution blocks, (c) refuse accumulations over wide areas of the Camp, (d) fouled areas around ablution blocks, (e) apparent increase in the number of cows, goats and pigs kept in the area, and (f) repeated blockages in the sewerage system, resulting in overflows down streets and in some cases through private properties.

Following upon representations to the Department of Bantu Administration and City Engineer's Department which culminated in a joint meeting on the 15th June, 1959, the undermentioned arrangements were agreed upon:

(i) Modifications to be carried out experimentally with two ablution blocks with a view to eliminating fouling of ground;
(ii) Pail services to be instituted in areas not sewered - pit privies to be eliminated;
(iii) Certain open drains fouled with stagnant waste-water to be concrete lined;
(iv) Additional ablution/sanitary blocks to be erected in area 1.B.;
(v) Population of area 2.B. to be thinned out as soon as practicable.

The necessity of immediately clearing all food and other refuse, favourable to fly-prevalence and development was stressed. Additional staff was made available by the Department of Bantu Administration and cleaning up operations commenced.

However all work was brought to a temporary standstill when rioting of a serious nature occurred on the 18th June, disrupting all health and essential sanitary services.

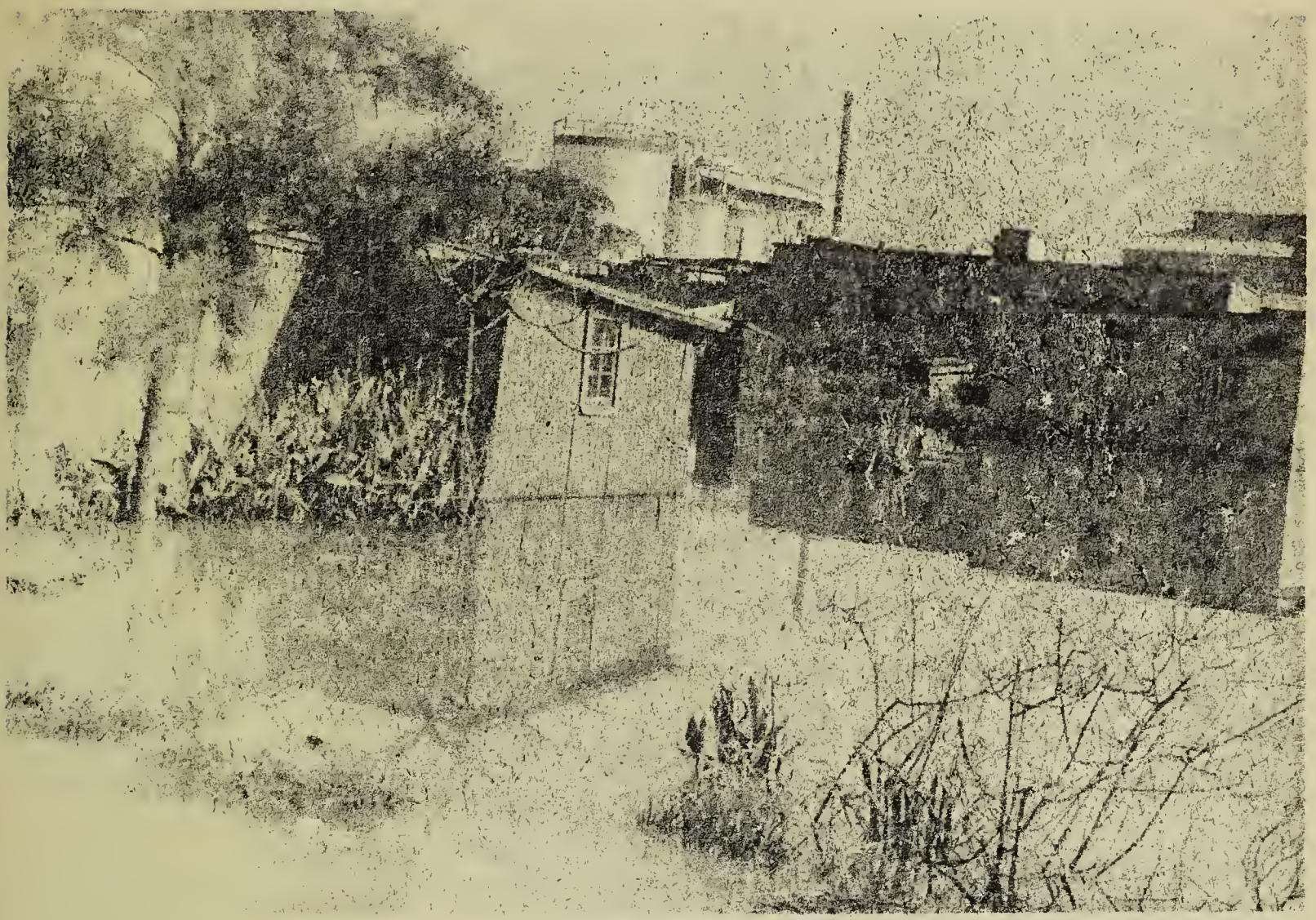
On 23rd July an inspection, in loco. was made jointly by the Chief Regional Health Officer (Natal), Durban Bantu Affairs Commissioner and representatives of various Municipal Departments - under escort by the South African Police.

This was followed by a joint meeting, in Committee, in the City Hall. At this meeting the attention of the City Council was drawn to the gravity of the public health position and the Council was urged by the Chief Regional Health Officer to put in hand, with Police protection if necessary, certain remedial measures. These measures involved factors other than public health and included influx control, reduction of population and road repairs.

After discussion it became apparent that the assistance of the Government was imperative and an approach to the Minister of Bantu Administration and Development was made.

By courtesy of the Minister a deputation from the City Council, including the City Medical Officer of Health, was received in Pretoria on 3rd August, 1959. From this meeting emerged the far reaching concession that part of the Umlazi Mission Reserve was to be developed as a Bantu Township. The City Council was requested to act as the agent of the South African Native Trust in the development of a residential area ultimately to accommodate ± 20,000 Bantu families. Provision was to be made for immediate development of half the sites (10,000) to which families could be moved as a matter of urgency, from Cato Manor.

HEALTH HAZARDS IN BUILT-UP AREAS



INUNDATION OF INDIAN HOUSING AREA BY FLOODWATERS WHICH WERE GROSSLY CONTAMINATED AS A RESULT OF THE BREAK-DOWN OF SEWAGE PUMPING INSTALLATION

CONSTANTLY RECURRING SEWAGE SURCHARGE DUE TO BLOCK-AGES IN DENSELY POPULATED CATO MANOR AREA

In view of this important development the policy of the City Council became one of the demolition of Cato Manor and the re-housing of its inhabitants, rather than any drastic measures to improve conditions in the area. In this the Health Department fully acquiesced, and efforts were made to restore the normal services of the area.

Towards the end of the period under review the sanitation chaos brought about by the riots was brought under some degree of control. The end result was that conditions were reasonably satisfactory in the circumstances.

In respect of sewer blockages the occurrence and severity were greatly reduced. All clearance work, towards the latter stages, was done under the supervision of a Bantu gang-leader. This arrangement appeared to meet with more co-operation on the part of the shack-dwellers.

At one stage debris arising from clearance of repeated obstructions was allowed to accumulate around the manholes resulting in gross offensive conditions and prolific development of flies. The institution of prompt action by the Department of Bantu Administration reduced the trouble to a minimum, and debris has been removed or raked and suitably covered with ashes or other available covering.

On the whole, during the latter part of the period, the treatment and disposal of refuse at the numerous collecting points was carried out satisfactorily. However, at a few points the need for extra attention was evident and with reference to Ridgeview Road, arrangements were made by the Director of Bantu Administration to make available extra labourers for this work.

A Departmental Sub-Committee for Co-ordination of Services in the Cato Manor Emergency Camp met at regular and frequent intervals. Problems affecting various Departments were discussed fully and necessary remedial measures formulated. Every effort was made to ensure that no essential issue lapsed. All outstanding matters were noted for report back to succeeding meetings.

Although Cato Manor at the end of the year was still in a state of bad hygiene and overcrowding, the existing services had all but returned to normal, and were being maintained in the sure knowledge that plans set afoot during the year would result in the elimination of its slums far sooner than was previously expected.

Umlazi Glebe

Routine inspections of the area were maintained and conditions, generally, remained at a satisfactory level.

Refuse Removal

This service, a Bantu Administration Department responsibility, has with the exception of a small period during the recent Native disturbances, been satisfactorily maintained. At the first inspection following the disturbances, some disorganisation was evident but this was rapidly cleared up.

Water Closet Facilities

These, with one exception, are of the pit type. No unusual development of flies or other nuisance has resulted and the majority are well maintained. Pits are renewed by the occupiers as occasion demands. The exception is a bucket which is paid for privately.

Foods and Drugs Act

The following foodstuffs were submitted to the Government Laboratory, Johannesburg, and the City Analyst.

Sample	No.	Samples Not in Conformity with Prescribed Standards, Action Taken and Result thereof
Boerewors	11	1 Prosecuted - Guilty
Butter	2	
Chicory Mixture	1	
Chutney	2	
Coffee	3	
Coffee Essence	1	
Coffee Mixture	7	
Confectionery: Liquorice	1	
Cordial, Fruit	4	
Cream	20	
Curry Powder	5	
Dates	5	
Dripping	12	
Fat, Cooking	1	
Fish Cakes	2	
Fruit, Dried	7	
Honey	7	
Ice Cream	25	
Ice Cream - soft	1	
Jelly, Crystals	2	
Lard	1	
Margarine	1	
Mealie Meal	1	
Milk	327	7: 1 Warning: 6 Prosecuted - Guilty
Minced Meat	71	12 Prosecuted - Guilty
Oil, Cooking	6	
Orange Juice	2	
Pepper, Black	3	
Pepper, White	1	
Pickles	1	
Polony	4	
Popcorn	2	
Salt	1	
Sauce	6	
Sausages	58	4 Prosecuted - Guilty
Squash, Fruit	1	
Sugar	1	
Sweets	2	
Tea	1	
Total Samples	609	Total Fines £156. 0. 0.

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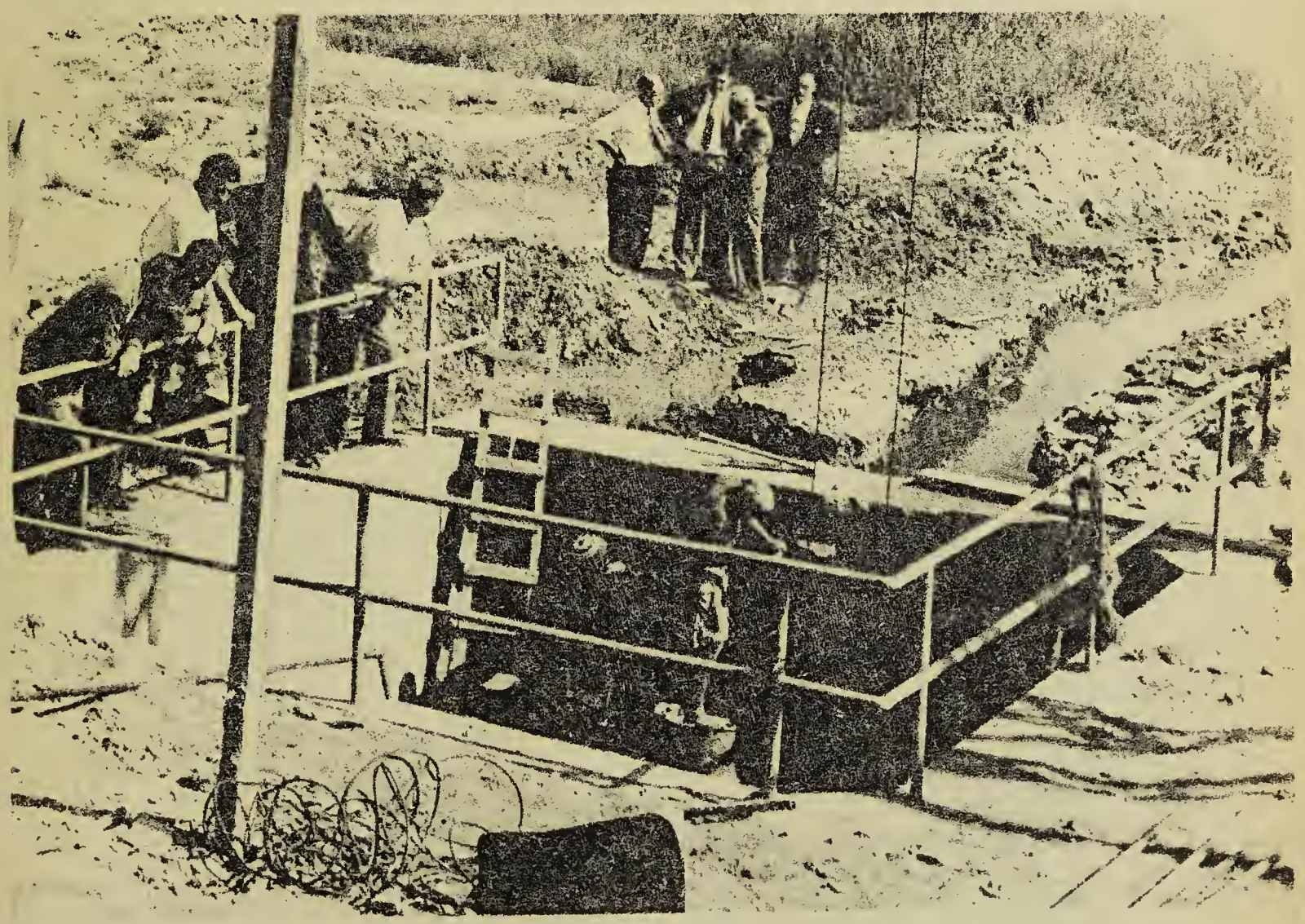
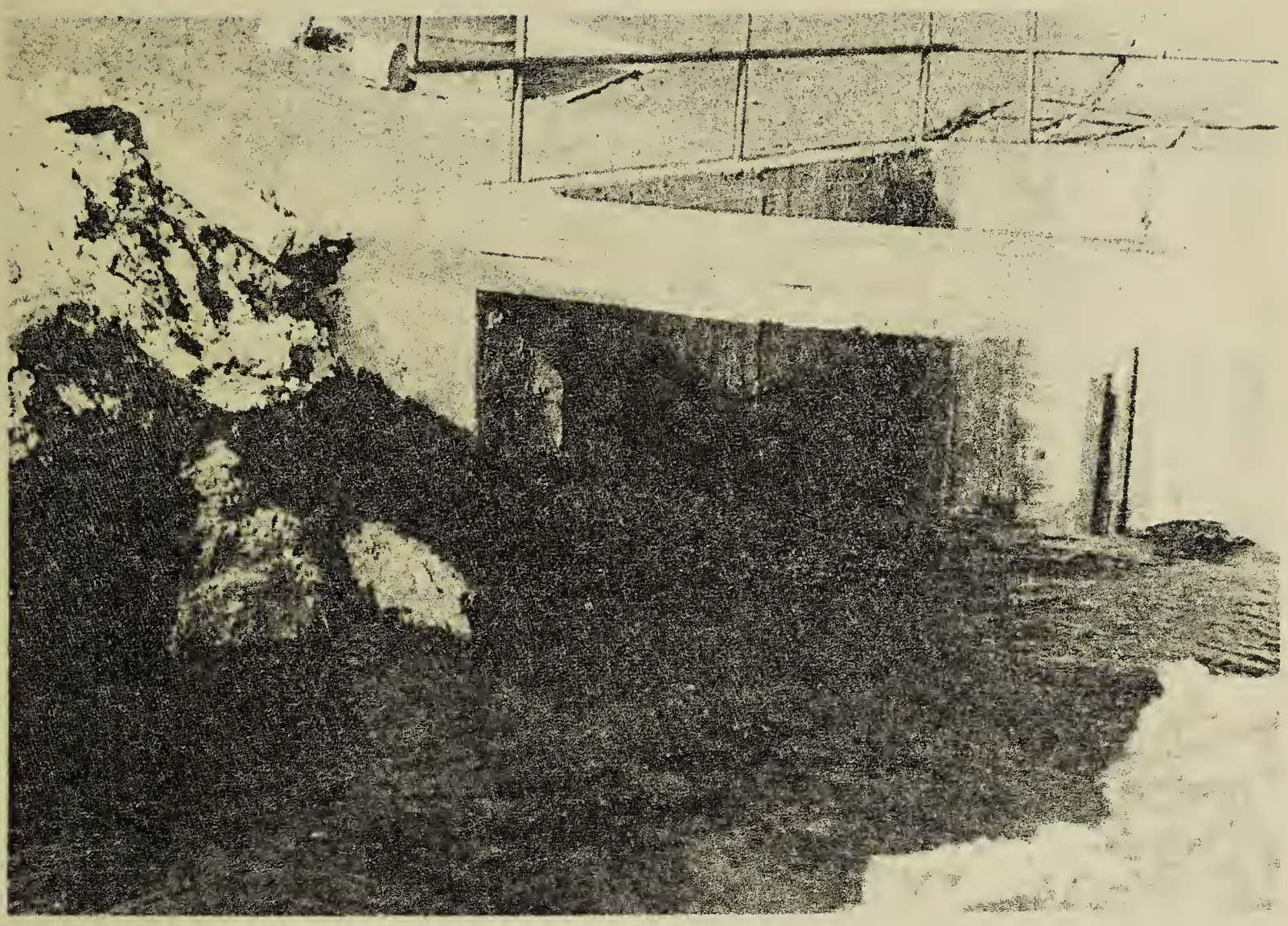
VAN RIEBEECK SWAMP

THE PROBLEM FACED BY THE DEPARTMENT



OPENING OF BLUFF TUNNEL OF 1500FT. LENGTH & 6FT. DIAMETER. THE FIRST STEP IN THE ULTIMATE DRAINAGE OF 500 ACRES OF SWAMPLANDS BY COMMENCING THE BREAK THROUGH INTO THE COFFER DAM AT TUNNEL ENTRANCE



WATER DISCHARGING INTO THE COFFER DAM & TUNNEL

THE PROBLEM RESOLVED

VIII. FIELD HYGIENE (PEST CONTROL)

The work of the Department in controlling (a) insect pests, and (b) rodents, is carried out by a field hygiene section. This section, under the supervision of a Senior Health Inspector, also undertakes the clearance of overgrown vacant land, which in the summer months presents a problem of some magnitude.

MOSQUITOES

Although considerable progress has been made during the year in reclamation and drainage, mosquito control has continued to be a major activity of this Department. The low-lying swampy conditions which prevail in many parts of Durban have given rise to intensive mosquito breeding. The Department has followed up intensive surveys and spotting with larval control, by ditching, clearing and larvicidal spraying. The species mainly encountered are culicine varieties, with moderate numbers of anopheles coustani, anopheles squamosis, and other anophelines. No malarial vectors have been detected during the course of the year.

Larvicides

Once again the tendency of mosquitoes to become resistant to certain types of insecticide has been noted. For this reason the Department has endeavoured to ring the changes whenever the tendency to resistance has become obvious. The use of the chlorinated hydrocarbon compounds has been superseded by organic phosphates, of which malathion has been found to be the most effective and economical. Larvicidal spraying of small collections of water has been carried out by means of knapsack sprays, but in the larger swamp areas the use of the high pressure pumps, either from the shores or from the boat, has been found to be invaluable.

Beachwood

The mangrove swamps in this area depend for their water level upon the tidal flow of the Umgeni River, aggravated by seepage from the large number of septic tanks in the Durban North area. In the past it has been found that biological control has been effective in these swamps in keeping larval development down to a minimum. During the past year, by reason of high spring tides, blockage of the Umgeni River mouth and certain engineering works, abnormal development took place upsetting the biological control, and the Department with reluctance resorted to larvicidal spraying.

Van Riebeeck Park

During the course of the year the 1,500 ft. drainage tunnel through the Bluff ridge to the sea was completed. Within a matter of weeks the millions of gallons of water in the Van Riebeeck Swamp had drained away, and in the latter months of the year the whole area was dry apart from certain isolated minor pools which were controlled by spraying. The mosquito nuisance to residents of the Bluff living within mosquito flight range of this swamp had been entirely eliminated.

Bay Head

Contrary to expectations the elimination of the Van Riebeeck Swamp did not reduce the number of mosquito complaints emanating from the Bluff as a whole. During the early months of the year it became obvious that the section of the Bluff overlooking the Bay Head was undergoing one of the worst mosquito nuisances with which this City has had to contend in recent times. Check surveys with a knock down spray in private houses showed as many as 200 mosquitoes in one room. Investigations disclosed that the

sources of breeding were a number of collections of water on the Bay Head itself where reclamation and development by the Railway Administration, without due regard to drainage, had resulted in the formation of marshy conditions and collections of stagnant water.

The position became worse with the heavy rains experienced in March. After discussions between the Mayor of Durban and senior officials of the Railways Administration, authority was given by the City Council for this Department to use all its resources in assisting to combat the problem. Accordingly one European General Assistant, a Bantu Spotter and two Bantu labourers were assigned to this area, which is under the jurisdiction of the Railway Administration. Full use was made of the high pressure power pumps and the boat. Before any effective spraying could be undertaken it was necessary to cut passageways to swamps so as to give access to the boat. Continued effort resulted in gradual improvement, confirmed by the results of check surveys in dwellings in the Grosvenor Area. Nevertheless it was evident that mosquito infestation although on a reduced scale was still causing considerable nuisance, and that the only hope of its elimination lay in drainage and reclamation works of a permanent nature. Accordingly the Mayor and members of the Public Health Committee of the City Council interviewed the General Manager, South African Railways in December. The General Manager, having made a personal inspection of the area, undertook to make financial provision for the necessary work as a matter of urgency.

RODENTS

Particular attention has been paid during the year to the control and destruction of rodents. The work of this section was reorganised to enable the General Assistants to work more closely in conjunction with the Senior Divisional Inspectors. Close attention has been paid to buildings under construction or demolition.

Systematic indexing by means of poisons has been carried out at points throughout the City.

In regard to rodent destruction, intensified operations were carried out on Municipal property using mainly anti-blood coagulant poisons. Outstanding results were achieved at the Municipal Markets and the Municipal Abattoir. These measures have to a large extent eliminated the more cumbersome gassing with cyanogas, which was the method in use for many years. Check gassing however is still carried out at intervals following upon the poisoning, and the results have indicated that the rodent population in these premises is decidedly less than previous years.

A close liaison is kept with the Port Health Authorities who are responsible for rodent control within the harbour area.

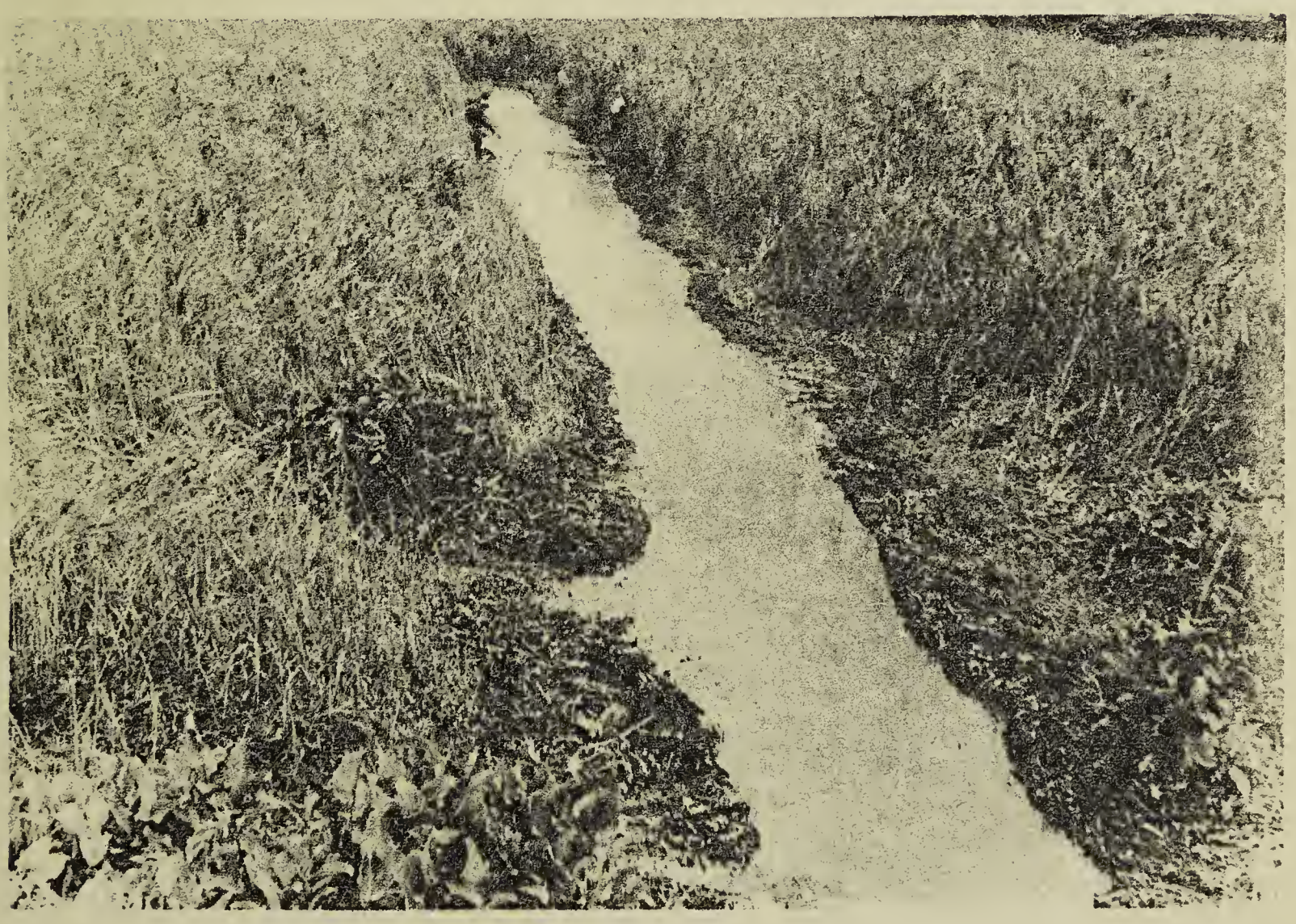
FLIES

The central and residential areas of the City have been remarkably free from flies throughout the year. In those cases of fly prevalence which have been reported the source has invariably been traced to the introduction or storage of compost and manure for gardening purposes.

In the Cato Manor area flies have been prevalent throughout the year to a disturbing degree. In an effort to control breeding, for which conditions are rendered ideal by accumulations of filth throughout the area, it was decided to conduct a fly poisoning campaign on a large scale. The technique was to use an organic phosphate poison bait ("Tugon") mixed with sugar in tins suspended from suitable points throughout the area. To this end several hundred tins were prepared and baited, with the addition of

BAYHEAD SWAMPS

TYPICAL MOSQUITO BREEDING CONDITIONS



IMPROVEMENT MEASURES : ACCESS CANALS FOR CARRYING OUT ANTI-MOSQUITO CONTROL PROGRAMME

fish traps as an attraction to flies, and distributed roughly in the ratio of one to three or four shacks. The results were highly satisfactory. Enormous kills of flies in the tins and surrounding yard areas were noted.

Fly nuisances emanating from Municipal refuse tips caused some concern during the year. It was possible by use of fly baiting with "Tugon" to alleviate the position somewhat. The importance of correct methods of tip control in the prevention of fly breeding was stressed to the Cleansing Section of the City Engineer's Department. Towards the end of the year considerable improvement had taken place on the City's main refuse tips in this regard.

COCKROACHES

The continued routine spraying of sewer and stormwater drains by trained personnel has been effective in greatly reducing the numbers of cockroaches. Very few complaints have been received from the public of cockroach infestation. Experiments were made in the use of a fogging machine, but it was found that the best results were obtained from the use of residual sprays of BHC, Dieldrin and Malathion. To date no sign has been found of these insects building up an immunity to the insecticide used. Manholes checked six months after treatment have been found cockroach free.

BUGS

The Department does not undertake the destruction of bugs on private premises, but is called upon to carry out this work on Municipal non-European barracks and hostels. Outstanding results were achieved with Malathion residual sprays.

VACANT LAND

Numerous complaints were received throughout the year of overgrown vacant plots. In the humid months the growth of grass and Lantana bush and other weeds in Durban is phenomenal. The public health implication of these conditions arise from the fouling of the bush and grass by vagrants and animals. As will be seen from the statistical table considerable time and effort is spent upon the alleviation of this nuisance.

MOSQUITOES

Yards ditching under-taken	Materials Used	
	Oil	Insecticide (Concentrated)
322,813	1,600 gallons	1,200 gallons X

X = Diluted as conditions dictate.

RODENTS

Rodents Destroyed	Rodents sent for Plague Index	Poison Used
* 4,449	97	3,010 lbs.

* These figures are of rodents recovered only.

FLIES

Insecticide Used	Poison Used
3,495 gallons: 27½%	1,427 lbs.

COCKROACHES

Insecticides Used	Manholes Sprayed
656 Gallons	19,523

BUGS

Insecticides Used	Rooms Treated
590 Gallons	492

BUSH CLEARING

Plots Cleared	Approximate Extent
517	225 Acres

IX. NIGHTSOIL AND REFUSE DISPOSAL

The cleansing and night soil services in this City are administered by the City Engineer's Department. The following report is reproduced by courtesy of the City Engineer.

"CONSERVANCY: The conservancy service in the unsewered areas of the City was carried out regularly throughout the year. In addition sanitary services were extended to shack areas whenever practicable (depending on terrain, length of carry, road access, etc.).

The following table shows the number of services given in the various unsewered districts of the City:

District	1958/59	1957/58
Sydenham	357,452	331,761
Greenwood P ark	402,755	354,786
South Coast	394,056	351,914
Bluff	332,523	261,429
Umhlatuzana	273,628	240,061
Mayville	442,420	349,997
	2,202,834	1,889,948

REFUSE REMOVAL: The collection and disposal of refuse was carried out regularly throughout the year. A total of 366,884 cubic yards was handled compared with 374,846 in the previous year. The revenue from the collection of trade refuse was £29,443 compared with £31,107 in the previous year - a decrease of £1,664.

REFUSE DISPOSAL: Although the policy of disposing of refuse by dumping on low-lying and swampy areas in the Southern Areas was continued as in previous years, the manufacture of compost from the refuse was continued at Springfield. The cubic yardage being composted represents approximately one-third of the total refuse collected and as the finished product finds a market at 15. Od. per cubic yard, this constitutes a major improvement as regards the disposal of refuse. A schedule giving details of the quantities of refuse collected and where disposed of, is set out hereunder:

	House Refuse 1958/59 Cu. Yds.	House Refuse 1957/58 Cu. Yds.	Street Sweepings 1958/59 Cu.Yds.	Street Sweepings 1957/58 Cu. Yds.
Springfield	- -	- -	- -	- -
Harris Park	- -	- -	- -	- -
Marigold Road	27,357	45,245	215	218
Subway (Sea Cow Lake Road)	146,691	89,329	8,177	5,291
Lamontville	5,375	17,391	119	634
Tara Road	99,276	84,860	4,396	3,526
Compost Sites - Springfield	65,785	109,373	13,211	15,841
Bellair	2,487	1,465	-	-
Oliver Lea Tip	-	-	4,477	4,387
Waste Paper - To S.A.Board Mills	1,021	182	-	-
Destructor	87	89	-	-
Chesterville	-	-	-	-
Booth Road	-	12,567	-	-
Roadside Disposal	-	-	5,785	11,179
Extra Refuse at Various Tips	18,805	14,345	-	-
TOTALS	366,884	374,846	36,380	41,076

STREET SWEEPING/WASHING: The sweeping of the streets of the City was continued regularly through the year and approximately 36,380 cubic yards of sweepings were collected compared with 41,076 cubic yards collected in 1957/58 - a decrease of 4,696 cubic yards. Street washing in the Central City Area was re-commenced during the year.

COMPOSTING: The composting of refuse has continued during the year under review. The approximate total revenue received from the sale of compost for 1958/59 was £5,537 compared with £4,193 for 1957/58 - an increase of £1,344.

SALVAGE: Salvage realised £1,110 compared with £2,059 in the previous year - a decrease of £949.

PUBLIC CONVENIENCES: One Municipal public convenience was reconstructed in Nicol Square during the year. The total number in the City is 114, of which 31 are solely European, 5 are combined European and Non-European and 78 are Non-European. All conveniences were well maintained."

X. AIR POLLUTION

Although the control of air pollution measures is vested in the City Engineer's Department, this Department is vitally interested in the progress of the Cleaner Air Campaign. The gravity of the situation was strongly underlined in an article published in the British Medical Journal in October by Dr. Geoffrey Dean, M.D., M.R.C.P.

The main points brought home in the article were:

(a) That the incidence of lung cancer in South Africa is disturbingly high in the urban areas;
(b) That the mortality from this cause is especially high in Durban;
(c) That air pollution, which bears an accepted relationship to lung cancer, is particularly bad in South African cities;
(d) That Durban, because of its geographic and climatic features is especially liable to air pollution.

This but served to emphasise the concern which has existed in Durban regarding air pollution for some years and which led to the inauguration of a cleaner air campaign in 1956. During the past year considerable progress has been made in this field. Set out below, by courtesy

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of the City Engineer, is a report by the Air Pollution Engineer of the City Engineer's Department.

"The Durban Corporation established the Cleaner Air Consultative Committee at the end of 1956 to advise the Council via its Works Committee of measures for the prevention of Air Pollution in Durban and to co-ordinate the activities of all sections of the community involved. The Committee includes representatives from the Chamber of Industries, the Hotels Associations, Laundries and Dry Cleaners, Electricity Supply Commission, Railways, Shipping, Mechanical Engineers as well as the City Engineer the Electrical Engineer and the Medical Officer of Health. Therefore, although the Air Pollution Control Section comes under the City Engineer, the closest co-operation exists between the Municipal Departments and outside interests.

The Committee took a major step forward in the Cleaner Air Campaign by approving this year the Durban Clean Air Plan put forward by the City Engineer's Department. This makes provision for the establishment of smokeless zones throughout the predominantly residential and commercial areas of the City and, following the Council's approval of the Committee's recommendations the Durban Beach front area was declared the first smokeless zone in South Africa by the Provincial Gazette on 17th September, 1959.

This legislation is being implemented in the same spirit of co-operation which characterises the whole campaign and a survey is currently being conducted throughout the entire Central area of the City with a view to establishing the second smokeless zone. A number of Industries will be included in these zones but ample time and assistance are being given to make any modifications which may prove necessary to existing fuel burning appliances and the Corporation's own loan scheme is available in necessitous cases.

The Smoke Control By-Laws were further amended with the approval of the Committee to make the emission of smoke which causes a nuisance, in the normal sense of the word, an offence. Here again well over 1,000 complaints of air pollution have been dealt with since the Committee came into operation three years ago it has only been necessary to resort to the courts in one case.

The permissible limit of smoke emission was automatically reduced to dark smoke instead of black smoke which was permitted during the first year of the By-Laws to enable people to make the necessary modifications etc. with the assistance of the City Engineer's Department. The monthly records of the smoke emission of the various firms throughout the City published by that Department indicate the considerable measure of co-operation obtained. For example when these lists were first drawn up there were only 17 firms throughout the City operating throughout the month with no observable smoke emission whereas on the latest list available for November 1959 the number of firms with no observable smoke emission is 47. The firms on the lower end of this list are all making provision for the installation or modification of existing equipment to meet the requirements in the near future.

The problem of smoke emission from the exhausts of public service vehicles has been the subject of an inter-departmental sub-Committee and, since 1957, over 600 vehicles have been temporarily suspended pending the necessary repairs. With the co-operation of the S.A.R. and the screening to local footplatemen of the Corporation film on locomotive firing the smoke emission from locomotives has been

considerably reduced. Of the 2,000 snips visiting Durban during the year, 1,000 were visited and their Masters and Engineers interviewed to enlist their support in the Durban Cleaner Air Campaign. The odour control measures adopted at the Oil Refinery and Whaling Station in co-operation with the City Engineer's Department have, largely been successful, although occasional lapses do occur. These are the subject of joint investigation, as they arise.

A great interest has been shown in the activities of the Committee by Municipalities throughout South Africa and the Rhodesias and numerous visitors have been sent to gain an insight into the Durban Campaign. Councillor Mr. F.E.Cheek presented a paper by the Durban Air Pollution Engineer to the Jubilee Conference of the National Society for Clean Air which was apparently very well received. The interest shown in the Durban Cleaner Air Campaign is reflected by the proposal of a central air pollution research and co-ordinating section which the C.S.I.R. hopes to establish in Pretoria. It has approached various Municipalities for grants in aid for this work and the Committee recommended a grant of £1,500 per year for five years which has been approved in principle by the Council."

It will be seen that Durban is well in the lead in South Africa in air pollution control. At the same time there is no room for complacency; air pollution remains one of the most serious health problems in the City.

XI. MILK SUPPLIES

The City's milk supplies are drawn in the main from the midlands of Natal and from East Griqualand. (See map overleaf). Milk from some 810 producers is bulked and cooled at 9 up-country balancing stations. Thence it is transported to Durban largely by insulated tankers, and is pasteurised and bottled at four milkdepots in, or on the periphery of the City. Within the City it is distributed to consumers in bottles, and, in respect of a small quantity, in "Tetrapak" containers. Refrigerated milk vans are in use for the carriage of bottled milk to suburban centres. A percentage of milk finds its way directly to pasteurising depots in milkcans, but this quantity is diminishi

During the year six "A" Class (raw milk) producers were eliminate leaving only one raw milk registered producer. By the end of the year 99.6% of the City's milk intake was pasteurised or sterilised. This represents a very satisfactory state of affairs. Nevertheless the Department is pursuing its goal of pasteurisation of all milk supplies.

Daily Consumption

Daily consumption averaged approximately 32,200 gallons of which 32,100 are pasteurised. Of the six raw milk suppliers eliminated, two have discontinued production, three have switched supplies to pasteurising depots and the remaining one has installed his own pasteurising plant.

Sampling

Regular sampling of all milk supplies was carried out, the samples being delivered to the Department's milk laboratory for bacterial and chemical examination.

Structural Requirements

The process of gradual improvement in the structures of dairy farms has continued. Durban's by-law requirements are fairly exacting, and the process of farm dairy improvement has proceeded for a number of years. The following table indicates the progress made during the past year.

			1958	1959
No. of premises	91 - 100%	structurally complete	94	115
" " "	81 - 90%	" "	203	252
" " "	71 - 80%	" "	201	240
" " "	61 - 70%	" "	99	119
" " "	51 - 60%	" "	84	43
" " "	Under 50%	" "	85	41

These improvements mean in effect that less time was spent by dairies inspectors on purely structural requirements, and that they were able to concentrate oh more hygienic handling and production methods

Balancing Stations

Regular inspections have been carried out throughout the year of up country bulking stations. Several of these depots were improved structurally and the standard throughout was good, both from the structural and handling aspects.

Pasteurising Depots

Regular inspections of the four pasteurising depots have been carried out, and a close watch kept on methods and staff.

Soft Dairy Mix

One of the problems which has beset the Department has been the increase in the production of "soft mix". This product, which superficially resembles ice-cream, does not fall within the definition of ice-cream as laid down in the Food, Drugs and Disinfectants Act, and may contain a fraction of the butterfat content prescribed for ice-cream. Efforts to persuade the Union Health Department to bring this product under control were not successful.

The soft-mix is obtained from recognised depots within the City and is dispensed by means of dispensing machines which chill the mix and provide the necessary "over-run". Experience has shown that inefficient handling and cleansing methods readily lead to high bacterial counts, and every effort is made to check all distributors of this product. The advance in sales of this inferior foodstuff is not without its danger to the public health.

Pirate Milk Supplies

Regular checks were made at the Durban Railway Station in regard to the possible introduction of unauthorised milk into the City. No cases of "pirate" milk were reported during the year.

Statistics - Inspectional Programme

Total dairy inspections	2836
Total City dairy inspections	1436
Total ex-City dairy inspections	1400
Initial farm dairy inspections	142
Country depot inspections/sampling	193
Personnel vi-tested/immunised	1919
Personal notices to producers	55
Written notices served	360
Number of samples taken under Foods, Drugs and Disinfectants Act:	
Milk	254
Cream	35
Ice-cream	36
Number of samples for T.B.	37
Prosecutions:	
Food, Drugs and Disinfectants Act	5
Milk (and Milk Products By-laws)	3

Laboratory Control

A well equipped laboratory, staffed by two trained lady laboratory technicians, under the control of a veterinarian, is maintained for the routine tests on the City's milk supplies. The following tests were performed during the period under review:

Bacterial Counts (Breed Clump Counts)	7,731	(8,060)
Presumptive B.coli Tests	2,233	(1,935)
Eijkmann Tests (for B.coli Type I)	250	(213)
Methylene Blue Reduction Tests	470	(531)
Phosphatase Tests	1,599	(1,343)
Plate Counts (roll tube method)	1,381	(215)
Titrateable Acidity Tests	469	(666)
Brucellosis Tests (Stained antigen)	2,052	(1,244)
Sediment Tests	6,426	(5,513)
Butterfat determinations of Milk	15	-
Freezing point determinations of Milk	4	-
Resazurin Reduction Tests	274	-
Tuberculosis (biological)	37	(126)
Mastitis Tests (direct microscopic)	10,513	(13,024)

(The figures in parenthesis are for the previous year)

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The following is a summary of results obtained throughout the year on various dairy products. (The standards laid down are as follows: Bacterial Count - shall not exceed 200,000 per ml.; B.coli (presumptive) - shall be absent in 0.01 ml.; B.coli (faecal) - shall be absent; Methylene Blue - shall not turn in less than 4 hours; Acidity - shall not exceed 0.18% titrateable acidity).

(a) Pasteurised Milk: Pasteurised milk in bottles is bought on the rounds from the four pasteurising depots in town. Daily phosphatase tests are conducted as well as other examinations. Milk sold in cans to hotels, hospitals and other institutions is also sampled.

Tests	No. of Samples (Bottles)	% Passed	No. of Samples (cans)	% Passed
B.coli (presumptive)	383	89%	93	86%
B.coli (Eijkmann)	235	98%	-	-
Acidity	228	100%	-	-
Plate Counts	344	98%	14	90%
Phosphatase	487	96%	93	100%

(b) Raw Retailed Milk: Milk from the six registered "A" Class dairymen was regularly sampled. During the course of the year four of them elected to become "B" Class dairymen and one gave up dairying completely.

Tests	No. of Samples	Percentage Passed
B.coli	81	72%
Plate Counts	110	85%
Breed Counts	67	93%
T.B. (Biological)	37	92%
Acidity	83	100%

(c) Producer (Farm) Milk: All "B" Class dairymen were sampled approximately once a month by the dairy inspectorate at the depots and up-country balancing stations. The samples were brought to the Durban laboratory packed in ice in insulated containers and examined immediately.

Breed Clump Count

Total No. of Breed clump counts	6,426
% of counts under 200,000 per ml.	63%

Visible Dirt Sediment Tests

Total No. of tests made	6,426
% of clean samples	86%

(d) Ice-cream: The products of the three ice-cream manufacturers in the City were regularly sampled.

Tests	No. of Samples	Percentage Passed
Plate Counts	136	93%
B.coli	157	74%
Phosphatase	157	100%

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(e) Cream: Only cream processed by the pasteurising depots in the City was sold to the public.

Test	No. of Samples	Percentage Passed
Plate Counts	137	92%
B.coli	157	91%
Phosphatase	157	100%

(f) Soft Dairy Mix: This product is gaining in popularity and a regular check is being kept on the bacteriological quality of the final product dispensed by tearooms.

Test	No. of Samples	Percentage Passed
B.coli	173	61%
Plate Counts	173	89%
Phosphatase	157	100%

Hygienic Milk Production: Farm Control

As is evident from the adjoining map of Durban's milk shed, the majority of Durban's milk supplies are produced some considerable distance away from the point of consumption. Milk produced on a Monday evening is usually only delivered to the consumer on the Thursday morning of that week. It is therefore very necessary that milk for Durban's fresh milk market should be produced under the most hygienic conditions. Much has been achieved over the past few years in educating milk producers to adopt the correct and prescribed procedures and a large percentage of producers are also now satisfying the requirements of this Department from a structural point of view. Because of this fact, the dairies inspectorate is now free to concentrate more on hygienic production methods. In this way a stable "hard-core" of genuine dairy producers has been built up to supply Durban's needs in summer and winter.

A survey of the bacteriological standard of milk produced in the various up country areas shows marked variations in quality. This can be ascribed to various factors but one of the reasons for an area having consistently good or bad counts is the standard of acceptance applied throughout by the management of each bulking station and the milk graders on the platform. There is for instance one depot situated some 200 miles from Durban, the suppliers to which have excellent bacterial counts, whereas at another depot only 52% of the suppliers produce milk of a satisfactory bacterial quality.

On the whole, however, the position is fairly satisfactory with 63% of all the Breed clump counts done on producers' milk (total examined 6,426) under 200,000 per ml., and with 73% of the producers showing satisfactory results from a bacteriological point of view.

Animal Diseases Affecting Milk Supplies

Most of the following information has been made available by kind permission of the Sub-Director for Veterinary Services: Natal.

Lumpy Skin Disease: Only a few mild outbreaks have been reported of this disease, which in past years has affected the milk industry severely by reducing milk yields through infertility in animals. During the year the State Veterinary Authorities announced the production of an effective vaccine against the disease.

Infectious Bovine Infertility: Vibriosis is undoubtedly the main cause of infertility amongst dairy herds. The lack of an easy and reliable diagnostic method for vibriosis as well as for trichomoniasis has hampered the control of both diseases. Good results in combating both diseases have followed on the introduction of artificial insemination. This service is well controlled and under professional supervision and offers semen from a variety of well proven sires.

Tuberculosis: Intradermal tests done by veterinarians show that there is a high incidence of the disease in the Durban and coastal areas. In the rest of Natal and East Griqualand the incidence is very much lower. Out of a total of 12,807 tests performed, 365 were positive. Of these positive reactors, 242 or 66% were found in the Durban area. The same trend was observed by this Department when out of 37 biological tests for tuberculosis with pooled herd milk, 4 gave positive reactions. The milk from three of these herds was destined for the raw milk trade in Durban. Needless to say milk from these sources was stopped immediately.

A limited number of biological tests were also conducted on the milk of "B" Class dairymen. One positive result was obtained on such a bulked herd sample. An intradermal test for tuberculosis on the entire herd revealed that 20% of the animals were infected. This was confirmed when the owner voluntarily decided to have all reactors slaughtered. Amongst the infected animals two showed udder lesions.

Brucellosis: Intensive propaganda among farmers to adopt voluntary inoculation against the disease has been continued. Results obtained from regular stained antigen ring tests on producers milk have shown 1% of suspicious reactions.

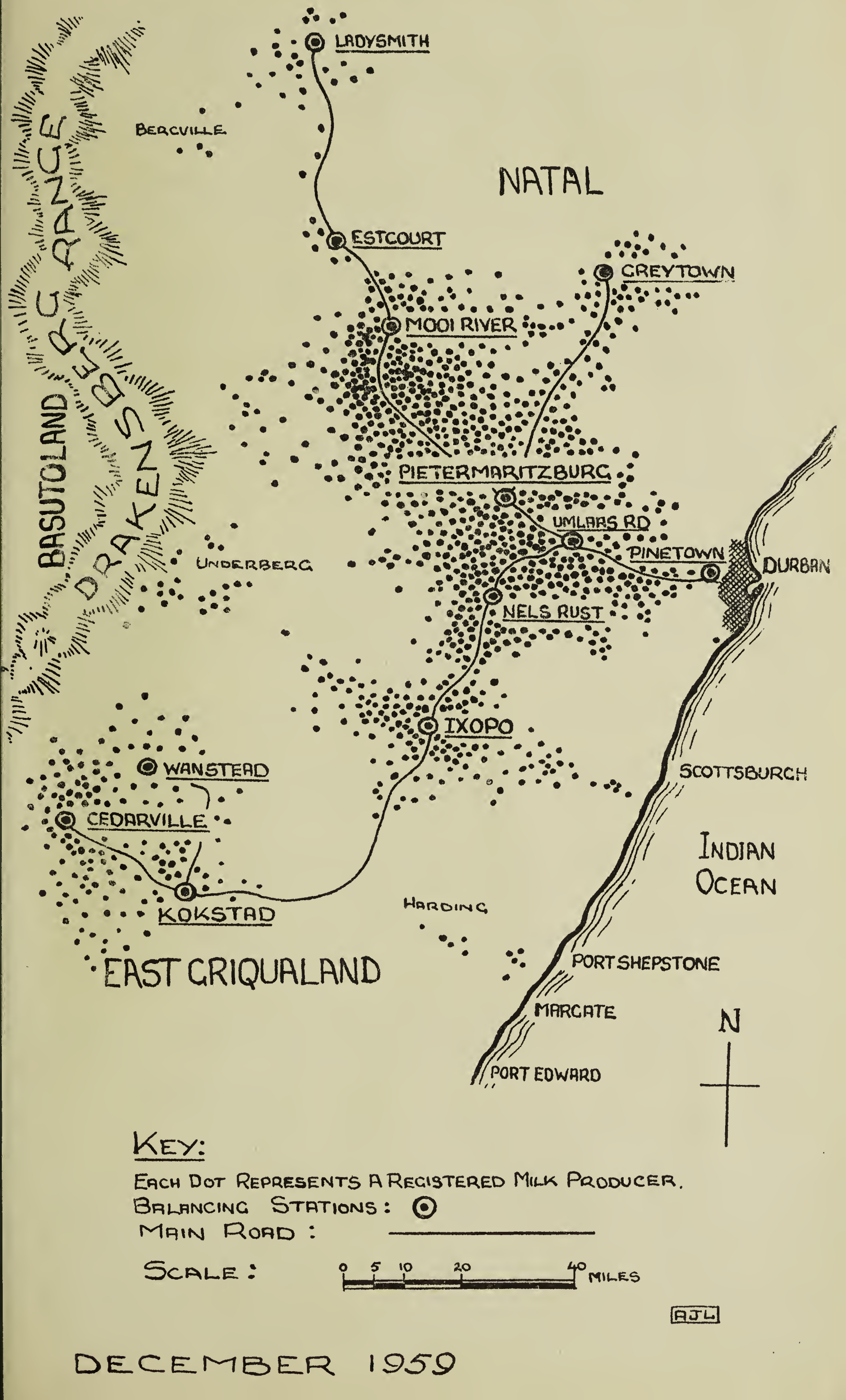
Mastitis: Of the routine raw milk samples from producers, 17% showed mastitis infection when examined for typical streptococci (Str. agalactiae) by the direct microscopic examination of cream smears. Farmers have been encouraged to send in quarter and udder samples for diagnostic purposes. Clinical examinations were carried out where possible and a close liaison kept with private practitioners responsible for the health of individual dairy herds.

Other Diseases: Endemic outbreaks of two tickborne diseases - piroplasmosis and anaplasmosis - were alone responsible for heavy mortality amongst the bovine population of Natal and East Griqualand (9,733 deaths). Most dairymen, however, take adequate tick control measures and this figure is probably made up largely of non-European owned stock.

Antibiotic Contamination of Milk Supplies: Attention has recently been focussed on the presence of antibiotics in milk supplies. This is due to the increased use of antibiotics in the treatment of mastitis, especially by the intramammary route. The presence of antibiotics in milk used for the manufacture of cheese may inhibit the normal growth of the starter cultures and spoil the product, and consumption of contaminated milk may lead to sensitization to penicillin and subsequent allergic manifestations. Unfortunately the pasteurisation process does not completely destroy these traces of antibiotics in the milk.

A survey conducted by a Transvaal local authority showed that 3.09% of the individual milk supplies were contaminated with penicillin. There is also good reason to suspect contamination of Durban's milk supplies, especially those coming from certain areas. The establishment of the presence of very small quantitites of penicillin in milk requires a specialised laboratory technique, however and auch a survey has not yet been conducted on Durban's milk supplies. The Department intends, however, to carry out such a survey in the near future.

DURBAN'S MILK SHED



KEY:

EACH DOT REPRESENTS A REGISTERED MILK PRODUCER.

BALANCING STATIONS: ⊙

MAIN ROAD: ———————

SCALE: 0 5 10 20 40 MILES

AJL

DECEMBER 1959

XII. MEAT SUPPLIES

The inspection of meat supplies entering the City, is carried out at the Municipal Abattoir, by qualified staff under the supervision of the Director. The following report is reproduced by courtesy of the Director, Dr. F.E.Cavanagh, B. V.Sc.

"1. SLAUGHTERHOUSES: Two establishments are situated in Durban, viz. (a) the Municipal Abattoir, and (b) The Federated S.A.Meat Industries Ltd., Maydon Wharf; the latter has not functioned during the year under review.

2. SYSTEM OF SLAUGHTERING: Bovines are stunned with captive bolt pistols, and pigs by the Electrolethaler method. Act No. 26 of 1934 (Humane Slaughter of Animals Act) prescribes the methods of slaughter. Sheep and goats are slaughtered by the throat cutting method, in deference to the religious beliefs of the Mohammedan community. Special casting pens are provided for the slaughter of cattle for Jewish and Mohammedan requirements.

3. MOVEMENTS OF LIVESTOCK: The numbers of animals arriving at abattoirs in controlled areas is limited by the Livestock and Meat Industries Control Board in accordance with local requirements. There has been no shortage of any species during this year.

4. DISPOSAL OF WASTE MATERIAL AND CONDEMNED CARCASES ETC. Condemned carcases and offals are treated in a by-product plant in accordance with the Public Health Act. From these are derived certain by-products (carcase meal and tallow); all blood from slaughtering operations is also collected and processed into blood meal. These by-products are sold and the revenue derived therefrom used to maintain the abattoir fees at a low level.

5. BUTCHERS' SHOPS: These are supervised by officials of the City Health Department.

6. CLEANLINESS OF VEHICLES, ETC.: Daily inspections are carried out at the Abattoir of vehicles used for transporting meat, and of the wearing apparel of non-European loaders.

7. CANTEEN: A canteen and change room for non-Europeans erected by the Council, provides improved facilities for these employees who are required to commence duties as early as 4 a.m.

8. CONDEMNATIONS: A detailed list of condemnations is attached."

Conveyance of Meat

During the latter months of the year special attention was directed towards hygienic methods of meat cartage. As a result, a number of prosecutions were made in respect of unhygienic practices.

Condemnations

A detailed list of condemnations is set out hereunder:

	Bovines	Calves	Swine	Sheep	Goats
Whole carcases condemned	769	59	1,030	497	29
Portions of carcases condemned in lb.	237,155	310	38,629	1,769,480	12,433
Total number of animals slaughtered	89,810	8,268	57,748	436,615	21,319

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XIII. WATER SUPPLIES

Durban's water supply is derived from the Umlaas and the Umgeni rivers, and filtered and treated at a number of purification works under the control of the City Engineer. Regular bacteriological and chemical examination of Durban's water supply, taken from sampling points in all parts of the City and at the District Waterworks, have been made by the staff of the Northdene Laboratories throughout the year. In addition this Department has consigned regular samples to the Union Health Department Laboratory as an extra check. The water has been of excellent quality and purity throughout.

Consumption (by courtesy of the City Engineer)
Total: 16,215,289,860 gallons
Daily Average: 44,425,452 gallons
Maximum on any one day: 53,292,000 gallons

Chemical Standards (By courtesy of the City Engineer)
(Average of Umgeni and Umlaas water for distribution)

p_H	7.3
$p_H s$	9.2
Colour	13
Conductivity	110
Turbidity	Nil
Total Solids	79 p.p.m.
Dissolved Solids	79
Suspended Solids	Nil
Chlorion (Cl)	17
Fluorion (F)	-
Iron (Fe)	0.13
Silica (SiO_2)	9.6
Ammoniacal Nitrogen	0.033
Albuminoid Nitrogen	0.073
Nitrite Nitrogen	Nil
Nitrate Nitrogen	0.24
Permanganate Value 4 Hours	0.7
Dissolved Oxygen	-
Free Carbon Dioxide	1.6
Hardness, as $CaCO_3$	
Total	33
Calcium	15
Non-Carbonate	8
Carbonate	25
Soda Alkalinity	Nil

Bacteriological Standards (By courtesy of the City Engineer)

(a) City Supply at distribution

Presumptive B.coli in 100 c.c.water	% of samples
0	82%
1-2	12.8%
3-10	4.0%
11.25	1.2%
Over 25	Nil

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Faecal B.coli on 100 c.c.water	% of samples
0	97.6%
1-2	2.4%
More than 2	Nil

Augmentation of Water Supplies

During the year a scheme for the augmentation of Durban's Umgeni River was prepared and presented to the City Council by the City Engineer.

Swimming Baths (By courtesy of the City Engineer)

Regular checks on all public swimming bath waters have been maintained. British Ministry of Health standards have been complied with as far as possible. The results have been transmitted regularly to the City Health Department.

XIV. LEGISLATION

1. Prevention of Illegal Squatting Act, 1951

Private owners of land have occasionally made use of the powers contained in the Act to secure the removal of illegal squatters, but in the past this local authority has relied upon proceedings under the Natives (Urban Areas) Consolidation Act, 1945 against landlords or shack owners for illegally harbouring Bantu people. However, litigation has at times developed into long drawnout and tedious actions, and although these actions have never been successful on the part of the landlords, they have tended to delay the re-settlement of the Bantu people. With the development of the kwaMashu township, at increasing tempo, for the proper re-housing of Durban's Native population, and in view of the most unsatisfactory conditions obtaining at Cato Manor, the City Council decided to proceed in terms of Section 5 of the Prevention of Illegal Squatting Act, under which a Magistrate may on affidavits placed before him by a local authority order the removal of such persons from the land or buildings concerned, if it can be shown that persons have entered and are congregated upon such premises, whether with or without the consent of the owner or occupier, and that the conditions and circumstances under which such persons are living are such that unless they are removed therefrom without delay the health or safety of the public generally (including the said persons themselves) may be endangered.

Several shack areas at Cato Manor have now been dealt with under this legislation.

2. Regulations Regarding the Prevention of Rodent Infestation

In October, the Minister of Health published his intention to rescind the existing Regulations and to frame new regulations affecting buildings and premises in urban and rural areas throughout the Union.

The Regulations presently in force relate to urban areas, and although certain new provisions could with advantage be incorporated to assist a local authority in controlling infestation, the draft new regulations, in widening the scope to include rural areas, envisaged the withdrawing of certain existing powers and introducing new principles such as the right of appeal to the Government.

After careful consideration the City Council requested the Minister not to apply the proposed regulations to Durban until consideration had been given to its several comments and criticisms.

3. Regulations Governing Nursery Schools

These regulations, framed in terms of the Natal Education Ordinance, were published by the Administrator with a view to controlling Government-aided European nursery schools. The regulations lay down a number of public health standards, and prohibit the use of the words "nursery school" as part of the name of any institution unless it is so registered in terms of these regulations.

4. Public Health By-laws

(a) Refuse

Provincial Notice No. 11 of 1959 had the effect of amending the By-laws relating to the Collection and Removal of Refuse. Inter alia they make provision for standard refuse receptacles, and increase the powers of the Medical Officer of Health in imposing conditions for the proper disposal of certain refuse which requires to be specially dealt with. In the

latter connection, if the Medical Officer of Health is of opinion that, in order to avoid any injury to health, special measures should be adopted, including special storage, treatment and disposal, he may require the owner of any land or premises to carry out any of such measures and, in default thereof, may arrange for such measures to be carried out at the expense of the owner.

(b) Dry-Cleaning Establishments

The By-laws relating to Dry-Cleaners' and Dyers' Establishments, Laundries and Depots were amended by Provincial Notice No. 631/1959 to control "electric dry-cleaning" involving the use of perchlorethylene as the solvent. The new by-law requires (i) a minimum of 1,500 square feet for the works area, which does not include those parts of the premises used as changerooms, storerooms, offices or the public reception area; (ii) the self-contained cleaning and drying machines being independently mechanically exhausted through ducting to a position at least 5 feet above the highest point of the premises; and (iii) the works area being mechanically ventilated from the outside atmosphere so as completely to change the air 20 times per hour.

(c) Food By-laws

Last year this Department instituted a prosecution against a food trader for a contravention of Section 17 (a) of the By-laws for failure to ensure that the premises were maintained thoroughly clean and tidy. The accused was convicted in the Magistrate's Court but the case was taken on appeal to the Supreme Court, which held that there was evidence that the appellant used his premises for the purpose of packing bananas but not that the bananas were sold or were intended for sale in Durban, and that the Crown had failed to prove that the appellant was carrying on a business. (S.A. Law Reports, April 1959 (2) - R. vs. Pillay).

The By-laws previously defined food as meaning anything intended for human consumption sold or intended for sale within the City, and this definition has therefore been amended to remove this restriction.

(d) Milk (and Milk Products) By-laws

In 1955 the City Council accepted the list of producers of milk-for-pasteurisation registered by the Pietermaritzburg City Health Department (approximately 70) for inclusion in the list of such producers maintained by this Department and consequently, the farms concerned were excluded from the Durban programme of dairy inspection.

Since that date the staffing position in the Dairies Inspectorate has improved, and as there was a need for re-introducing uniform standards for all milk producers supplying this City, the City Council rescinded its resolution. The farms concerned therefore have been included in the Durban programme of dairy inspections, and have been required to comply with the Durban by-law standards.

5. Building By-laws

Following representations by the Department, the By-laws have been amended in respect of bachelor flats and apartments.

(i) A minimum size has been adopted for this type of one-roomed accommodation;

(ii) Although owners of buildings and the health authority discourage the practice, food is inevitably cooked in apartment rooms. In some cases a wash-hand basin is provided in the apartment. Often utensils, cutlery and crockery are washed in the basin which is not a satisfactory arrangement. In a large number of cases the only facilities comprise communal bathrooms. Nuisances occur as a result of the washing of personal articles in such bathrooms.

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The By-laws now provide that even in the case of single apartment rooms a kitchenette with a minimum size of 25 sq. ft. shall be provided in each unit, in which will be installed an approved wash-up sink with water laid on, and suitable drainage.

6. House Drainage By-laws

The City Council has amended the By-laws more properly to control the standard of trade effluent discharged into the Municipal sewers. The By-laws now prohibit certain chemical polluted wastes from effluents emptied in the sewage system, and lay down the maximum quantities permissible in connection with other chemicals. The temperature of effluent may not in future exceed 110°F., and the pH value shall be less than 6.

7. Smoke Control By-laws

The original By-laws passed last year were found by experience to be inadequate in certain minor respects, and the Council took prompt steps to secure the necessary amendments. These involved, inter alia, a new definition of "light smoke", and a revised definition of "fuel-burning appliance".

8. Prosecutions

Contravention	No. of Counts	A.G.	Guilty	Not Guilty	With-drawn	Fines
1. PUBLIC HEALTH BY-LAWS						
a. Relating to Nuisances						
i. Premises kept in foul condition	1	1				2.10. 0.
ii. Sanitary fitments	1	1				5. 0. 0.
iii. Bug infestation	1	1				7.10. 0.
iv. Insanitary conditions	21	17	2		2	106. 0. 0.
v. Poultry keeping	2	2				5. 0. 0.
vi. Flies breeding	2	2				7.10. 0.
vii. Mosquitoes breeding	2	2				12.10. 0.
viii. Structural defects	16	9	5		2	72.10. 0.
ix. Defective drainage	10	6	3		1	48.10. 0.
x. Absence of suitable drainage	13	5	7		1	12. 0. 0.
xi. Failure to paint	3	3				15. 0. 0.
b. Collection and Removal of Refuse						
xii. Failure to cover refuse bin	2				2	- - -
xiii. Refuse on lorry not covered	3	3				10. 0. 0.
c. Prevention of Overcrowding						
xiv. Inadequate ventilation	1				1	
d. Relating to Privies and Cesspools						
xv. Privy where sewer available	14	6	7		1	16. 0. 0.
xvi. Absence of Privy	3	2			1	10.10. 0.
e. Keeping of Animals						
xvii. Animals kept without permit	1	1				15. 0. 0.

Contravention	No. of Counts	A.G.	Guilty	Not Guilty	With-drawn	Fines
2. FOOD BY-LAWS						
i. Cleanliness of Premises	38	19	3	1	15	115. 0. 0.
ii. Unsound Plant,etc.	1	1				10. 0. 0.
iii. Food exposed to contamination	14	11	3			64.10. 0.
iv. Sleeping in food room	2		2			5. 0. 0.
v. Live animals kept on premises	1	1				2.10. 0.
vi. Wearing apparel in food room	2	2				15. 0. 0.
vii. Cleanliness of van/ carrier	2	2				5. 0. 0.
viii. Absence of soap, towels, etc.	1	1				2.10. 0.
ix. Refuse storage	4	4				22.10. 0.
3. MILK (AND MILK PRODUCTS) BY-LAWS						
1. Inefficient Pasteurisation	1	1				5. 0. 0.
ii. Raw Milk below standard	2	2				15. 0. 0.
4. BUILDING BY-LAWS						
Illegal housing	1	1				7.10. 0.
5. ZONAL REGULATIONS						
i. Insanitary con-ditions	2	2				10. 0. 0.
ii. Vermin infestation	1	1				5. 0. 0.
iii. Structural defects	3	3				30. 0. 0.
6. FOOD, DRUGS AND DISINFECTANTS REGULATIONS						
i. Sausages with excess preservative	7	7				33.10. 0.
ii. Cordial - do -	1	1				5. 0. 0.
iii. Milk deficient in milk fat	5	5				40. 0. 0.
iv. Minced meat with preservative	14	14				80. 0. 0.
7. MALARIA REGULATIONS						
i. Potential mosquito breeding con-ditions	2		1		1	
ii. Failure to provide efficient drainage for storm water	1	1				5. 0. 0.
8. RODENT REGULATIONS						
Failure to remove cover or harbourage for rodents	4	3			1	20. 0. 0.
9. PUBLIC HEALTH ACT						
i. Food exposed to contamination	5	5				15. 0. 0.
ii. Failure to supply information	1		1			5. 0. 0.
TOTALS (£10. suspended)	211	148	34	1	28	863.10. 0.

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XV. HEALTH EDUCATION (Prepared by the Health Educator and presented largely as written).

If we could have seen the end of the year from its beginning, we would have asked with Christina Rossetti - "Does the road wind UP-HILL all the way?" and with her prophetically replied "Yes, to the very end" - for the year has been up-hill, especially toward the end. "Why?" Because into the even tenor of the year's work, came the Cato Manor riots causing a jagged cleavage in the year's calendar of work so that in retrospect it became customary to refer to "after" or "before" the riots by way of identification.

Overseas Press

On two occasions during the year, Durban received adverse overseas press publicity in regard to -

(a) Cato Manor riots;
(b) Kwashiorkor Bantu babies (referred to later).

On both occasions health education Bantu personnel were involved.

(a) Cato Manor Riots

On that stricken day in mid-June, the daylight cinema van was on its daily beneficent mission of health instruction in the shack areas of Cato Manor: suddenly it found itself in an arena of disruption, disorder, destruction. Only its long history of helpfulness to the Bantu saved it even from so much as a threat: indeed as often happens in moments of intense drama, laughter was close on its heels when Bantu women near the van chaffed the male lecturers about being the only men not literally being chased or actually beaten by the women folk! It was women's field day and the men were all on the run! A European driver was on duty on the cinema van. The police, in the sudden emergency, were in drastic need of a means by which to appeal to the threatening crowds, a means loud enough to soar above the accelerating crescendo of voices reminiscent of an impi on the march. Seeing the cinema van with its long distance public address system, they telephoned the department and were instantly given permission to make use of the loudspeaker equipment to call for quiet pending the arrival of the Director of the Bantu Administration Department.

Meanwhile their old friend the cinema van, called 'MboMbo' by the people, stood safely in the midst of people who later that day burned down their own free welfare services, Toc H.hut where free medical services were voluntarily given by European doctors of the City, their clinics, churches and schools - it stood unchallenged, unthreatened, a symbol of its own steadfast unremitting service of help through the years, and as such it was known by the people. The women were the aggressors that day, and it was to those same women through years of days that lecturers had patiently taught understanding of diseases of civilisation, of feeding infants, of protection by immunisation from those new ills which even their ancestral spirits were silent about. Those lecturers, had told those women, now raging with emotion, why their infants would not survive the continuous use of evil-smelling feeding bottles which contributed to gastro enteritis. They had pleaded the cause of kwashiorkor children. They had often stood outside a home while a procrastinating mother, under their urgent insistence reluctantly dressed to take her near dying infant to hospital - not tomorrow but 'now, now', and then had determinedly accompanied her on the way to make sure she did not turn back, determined as they went that she should understand that in cases such as her child's time was running out and delay would be fatal. Those wild women their

faces transformed with primitive emotions, had often listened quietly as their audience. Many had gratefully heard and followed the gleam which led them to the adjacent free municipal clinic where further light was shed. Others were too lazy or engrossed in their seething brews to care about the cry of pain from a child they did not want; but, all knew that from the 'MboMbo' they had always received truth which, applied, would help them. Truth whether palatable or distasteful, for lecturers had not shunned to declare unto them the whole counsel of promotive health. Now, with 'MboMbo' in their midst, the miracle happened. It was allowed to leave the scene unscathed. We who had been out of communication at the base were full of dis-ease at the lateness of the van's return, but although personnel arrived shocked at what they had witnessed, they were ready to return to that familiar parish as soon as quiet had been restored.

Wisdom dictated, however, that it was expedient temporarily to suspend the use of the van in that area. For the rest of the year Cato Manor was served by lecturers on foot and they were unfailingly well received. Portable visual aids were a valuable asset - as also a horn loud-hailer which became popular amongst the people.

The 'up-hillness' alluded to above was due, with other factors, to what we have come to call "the glove" or "chip on the shoulder". Lecturers constantly reported before the riots that "ever these our people seem to have some ant-heap of grievance which they make into a big hill they must climb". The chip had to be dealt with. It was out of perspective, it had become the whole universe and no good thing existed. Health affairs however vital to the family could not be heeded, and the 'chip' was the centre and circumference of their thinking.

It was found helpful to point them to the principle that everything is relative; that they must try to weigh things in an even balance. Lecturers aimed at getting their picture into perspective, listening sympathetically, and then firmly proceeding with the programme of health teaching which had suffered a set-back. On one such occasion a man from the crowd called "These men are right - even our witch doctors know the principle of balance".

If the way is sometimes up hill for the educator, it is also up-hill for those being educated. Learning new concepts of life, prevention of disease by rational methods and not by the incantations of the Isamgoma (witch doctor), absorbing the ideas of promotion of health through sound nutrition, family budgetting and child guidance. The most effective way of helping the African to mount his "hill difficulty" is still through the media of visual aids, demonstrations and films made and presented against his own background. Heartening incidents there are, enough and to spare where, months after a film has been shown, an adult or child will remind a lecturer of the occasion. Recently a group of Africans informed a health educator that in a certainarea families were "not eating properly". He pricked up his ears and asked "How do you know?". Then came the intelligent account of repair foods, canteen benefits, milk for children, dried beans and unrefined foods, straight out of a nutrition film shown months previously. The group referred to lived largely on refined mealie meal three times daily, and this self-constituted jury felt the lecturer shoulddo something about it, which he forthwith proceeded to do.

(b) Kwashiorkor In Bantu Babies

The report in the local press was duly splashed in overseas press alleging that Bantu babies in Durban were dying of starvation. It was, to say the least, an indictment of the Health Department, especially of its Health Education and Family Health Services to the non-Europeans. Although the Department was fully aware, because of its field and clinic activities,

of prevailing conditions, obviously a survey was called for to provide authorities with the unvarnished facts as they were and are.

Survey

The survey was conducted by Bantu lecturers of this section who daily visited the government non-European hospital- King Edward VIII and McCord Zulu Hospital. Names and addresses of all new cases were recorded. By kind permission of the Medical Superintendents of both institutions, the Bantu and Indian health lecturers were granted access to the wards so as to follow-up cases entered in the hospital admission books and to verify the diagnoses entered on the bed letters.

The aim of the survey was,

(i) To ascertain the proportion of bona fide CITY cases to the total number admitted;
(ii) To discover what factors appeared predominantly to contribute to the malnourished state of the patients; and
(iii) To find, if possible, practical solutions to the challenging problem.

The findings showed conclusively that by far the greater majority of Kwashiorkor cases admitted to hospital were from areas outside Durban.

Cases Investigated:	509
City cases:	72
Imported cases:	409
Unknown address:	28.

Illegitimacy

A shocking factor was the high number of illegitimate children among the patients . Of the 509 cases investigated no fewer than 305 were illegitimate.

Illegitimacy has a particular significance in the Bantu, because according to the custom the father of an illegitimate child has no responsibility whatsoever for the support of the child. He will not recognise any obligations, beyond the payment of two head of cattle to the girl's father, and this only if his paternity is proved. The welfare of the child, again according to custom, is the responsibility of the parents of the girl. Because of ignorance of the law, or perhaps because of its complexity, legal steps are seldom taken. The man feels quite at liberty to take another woman, beget other children, and again disclaim all responsibility. On the mother's side, when the "lover" abandons her she often does her best to get another man to help and support her. Another illegitimate arrives and so the snowball grows.

Factors Contributing to Kwashiorkor in Children of the Married:

(1) When both parents are working, the child is farmed out to neighbours, relatives or strangers: the money given for the child's food is not infrequently misspent and may be misappropriated. Again, parents frequently fail to inquire into what items of food the child has been given to eat.

The remedy here is to be found in the establishment of creches and every encouragement by way of financial support should be given to private agencies and welfare societies to establish these institutions.

(2) When a child is off colour or does not eat properly, the mother, not infrequently does not bother to go to clinic but allows the child's condition to deteriorate until it is in extremis. This is due to an innate laziness and a spirit of procrastination so natural to some Bantu women.

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HEALTH EDUCATION

PUPIL NURSES FROM KING EDWARD VIII HOSPITAL ARRIVING FOR A FILM SHOW AND DEMONSTRATION ON KWASHIORKOR

HEALTH EDUCATION MOBILE CINEMA VANS AND NON EUROPEAN STAFF

(3) Some cases investigated both from Cato Manor and kwaMashu, lived close to the local clinics. The mothers of these children could give no explanation as to why they had failed to avail themselves of the facilities provided especially regarding correct feeding methods.
(4) In some cases, although the child was legitimate the father was supporting more than one wife, or paying lobola for a new wife; not enough money thereafter remained for the purchase of more than mealie meal as the family's staple diet.
(5) A father often supported other women in addition to his wife ..... "on the sidelines" as it were.
(6) Children were found to be victims of the hire purchase system, whereby parents had bound themselves to long contracts of payment: in these cases food is always cut down and the child is the first to suffer as, according to Bantu custom, the father must get the best food.
(7) Some cases stemmed from neglected gastro-enteritis which often resulted from unwashed feeding bottles - and these near clinics! Diagnoses would then read, "gastro-enteritis + kwashiorkor".

Factors Governing Conditions of Illegitimate Children - City Cases

The predominant factor is that the child does not "belong" to a family unit; that the father, the wage earner, in most cases, disclaims financial or any other obligation.

(a) Frequently the father or the mother or both have absconded and the child has been abandoned to relatives, strangers or neighbours in which case there are no payments made for the child's food.
(b) Sometimes a deserted mother brews isishimuyane, becomes totally indifferent to the welfare of her child and does not take it to clinic.
(c) Sometimes a deserted mother, because she has nowhere to leave her child, does not go to work: she obtains what little money she can and the child quickly deteriorates in condition. If the mother is in domestic service and becomes pregnant she is usually in a sound and healthy condition and the child is usually strong and healthy at birth.
(d) Sometimes a domestic servant, deserted by the father, farms the child out and pays for its keep; too frequently money is not spent on the child and the mother visiting it only occasionally, is not aware of the child's condition. Here again creche facilities would be useful.
(e) At times mothers of illegitimate children are interested only in men and the accident of children is a matter of great annoyance to them. Cases have been reported where the mothers have deliberately allowed the child to become very ill before taking it to hospital: in this manner they may obtain release from an encumbrance which interferes with their male relationships.
(f) The mother may have a tolerable affection for her infant, but if the new man she acquires objects to the child, the man must not be offended, his wishes must be observed; if he objects, and he frequently does, to his money being spent on the other man's child, malnourishment sets in.
(g) There are a few cases where a mother has been receiving money for support of her children through a court order, but this she spends on herself, sometimes even on drink.
(h) There may be a semi-stable union in the town: then the man goes home to his legal wife: the woman is left in the City with her child without any money. In one such case under review, the child died.
(i) A number of married women in the country desert their kraals and husbands and come to the bright lights of the City; here they make an alliance with local men who desert their partners when the infants arrive. Sometimes this appears to be due to women of the younger generation raising objection to their polygamous state.

Imported Cases

Where possible mothers or fathers of imported cases were interviewed and the undermentioned facts ascertained.

In the case of certain rural areas, if the cows run dry and

the crops fail, there is general under-nourishment throughout the kraals even to the point of near starvation. In these circumstances, the baby is the first to suffer.

Rural mothers are notoriously ignorant of the techniques of feeding an infant with supplementary foods when it reaches the age of four months and onwards. Usually, the supplement takes the form of mealie meal.

In one or two cases the father in the City sends money home regularly but it is not used to buy food but is squandered on non-essentials.

In other cases the City father has acquired feminine interests on the spot which costs him money so that he sends only a small portion or none of his pay to the legal wife at the kraal. She then comes to the City - (a) to investigate her husband's affairs; and (b) to leave the child in hospital.

In rural parts of Zululand and Natal there obtains a Zulu custom by which a young mother is not allowed to drink cows' milk until a certain beast is paid to her father. In such cases, "grannie" usually has distribution of the milk and frequently feeds it preferentially to the menfolk. The disadvantage of an infant reared in these circumstances is at once clear.

Illegitimates - Imported

Here is a common picture:-

There are two or three daughters at the kraal: the courting man in each case works in a city, usually Durban or Johannesburg. He pays one or two beasts as part-payment of "lobola". The woman has a child but her father will not consent to marriage until the final beast, usually the eleventh, has been paid. The Bantu in the City refuses to keep on paying and deserts. The other daughters in turn suffer the same fate. The father, getting older, now finds he has to support his wife, three daughters and three illegitimates: however, his funds are quite insufficient to take the extra load and before long members of the family suffer from kwashiorkor, tuberculosis, and other deficiency states.

A similar situation arises in the case of an unmarried rural girl who becomes pregnant. Father demands two beasts for "damages". The man refuses and does not visit the kraal again. The daughter does not work, and has to be supported as well as the growing child; as the money will not go round the child falls a prey to malnutrition.

Cases Arrive from Far Flung Areas

Children suffering from kwashiorkor pour into Durban from all over Natal, Zululand, East Griqualand as well as occasionally from the Cape and Free State.

Father's Millstone - Keeping up with the Kumalos.

During investigations of kwashiorkor cases in Municipal Bantu townships, it was observed that they came from houses where, although the pantry was bare of space, the rest of the home was not bare of luxurious furniture. Exploratory excursions were made at random into many homes to assess the disbursement of income. Here are a few authentic examples of the scores which follow the same pattern:

Hire purchase debt for furniture = £209.
Income £35 per month (teacher) less transport £1.16. 0.
Instalment on furniture - per month - wife not able to say.
Number in family - 5.

Comments: Child sick, suffering from malnourishment.

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Not far from the teacher, Kumalo, is Mkize with only £5 - £6 per week. But Mrs. Mkize begins her propaganda on Mkize - all about Mrs. Kumalo's furniture - with this result:

Hire purchase debt for furniture = £268. 5. 8.
Income - Between £5 - £6 per week, less transport £1.16. 0. per month.
Instalment on furniture - £10 per month.
Number in family - 4.

Comments: Mother was sick, obviously suffering from malnourishment: father confided to lecturer "Don't talk to me about this awful thing, it weighs me down, but the women will have as good as Mrs. So and So or they nag to death".

Then neighbour Duma took the same path -

Hire purchase debt for furniture = £143.
Income £3. 5. 0. per week, less transport £1.16. 0. per month.
Instalment on furniture - wife didn't know.
Number in family - 6.

Comments: Mother in rags: child sick: pantry investigated and found to be empty except for mealie meal.

In the above and scores of other cases, Bantu have bought expensive furniture for the whole of the small house at once, including a "kitchen scheme", bedroom, dining room and often lounge suites, although because there is no lounge, the pieces are dispersed throughout the house. Lecturers battle with the question of paying interest, of buying a good second hand suite and only furnishing one room at a time, until the family is able, without cutting food rations, to buy their dream furniture and enjoy its beauty without debt. They strive to train judgement and awaken discernment in this matter but ... there are always "those Kumalos".

Asiatics and Kwashiorkor

There were only nine cases of kwashiorkor amongst the Asiatics during the period under review. The Indian family is a much more united and integrated unit than that of the African. The contributory causes of the disease differ considerably from those in the Bantu.

Of the nine cases, two children were abnormal: one diagnosis was revised "kwashiorkor + mental deficiency". Two cases were in families where the father was unemployed, and although they were drawing unemployment benefits, the sizes of the families precluded the maintenance of a good nutritional state in the members. Large families figure as a factor in undernourished Indian children: one family had eleven children. One of the above cases was due to the father being a drunkard.

Schools Programme

The year's coverage was:

Europeans - 16 schools - attendance - 2,740.

(These were senior classes and the teaching was on clean milk, a departmentally produced film being used. Scholars were astonished at all the hygienic observances necessary to land a bottle of germ-free milk at mother's door).

Coloureds	- 4 sessions	- attendances	- 1,850	(Includes teachers'
Asiatics	- 32 "	- "	- 3,829	(Training
Bantu	- 33 "	- "	- 4,098	(College

Private Asiatic Schools

These are acutely in need of health instruction as no hint of hygiene appears on their curricula, neither is it conspicuously present in practice. The enrolments are between 150 - 200 per school and many schools are under the aegis of a religious sect for the purpose of sectarian instruction. Others are run by the community and are not under government control. Principals of non-European schools covet health film programmes because of the lasting impression on the children, often reflected in end of year examination answers. Parents are encouraged to attend sessions: one group numbered 85.

A Government Request

The Minister of Health, through the Union Health Department requested information on the health education scheme pioneered by Durban. The letter stated "with the vast experience and success you have had, it would be very much appreciated if you could kindly furnish a detailed report on the scheme, e.g. material, equipment, personnel, etc. required, what the present methods of health education are, how these can be improved upon and what the estimated cost of such a scheme would be".

A descriptive and analytical report of this section's health education activities and development was forwarded together with an album containing photographic illustrations of the work.

Future Health Educators

Government, Provincial and Mission Hospital Nurses: The successful health lectures to mission hospital non-European staffs in the City were extended to Government and Provincial Hospitals. From King Edward VIII Hospital there were classes of 41, 43, 45, 47, 53 and 52, ranging from those in the preliminary training school to finalists. Subjects covered many examination requirements. Other attendances were as follows:

King George V Hospital	- 8	sessions	-	total attendance	1,086
St. Aidan's Hospital	- 2	"	-	"	50
McCord Zulu Hospital	- 1	"	-	"	125

Students were counselled not only as nurses but as future health educators amongst their own people and on certain health-social subjects they were also adjured as future mothers. Senior Sister Tutors reported noting most beneficial results. They said, for instance, that one viewing of the bilharzia film did more than all their lectures!

Where the Public Eat

We are experts at the game of robbing Peter to pay Paul - especially in the matter of drafting staff from one job to another. In this case the film technician is responsible for health instruction to personnel of hotels and public eating establishments. He interviews the manager, arranges times, himself presents the case for the prevention of the spread of disease to Indian waiters while an African deals with the Bantu staff.

In a popular seaside resort with no closed season there is constant need for reminding food handling staff of the need for exquisite care in the matter of preparation of food and of re-presenting the facts because -

(a) although theoretically a European supervises the kitchen, in the majority of cases, non-Europeans are left to themselves;

(b) as too often in their own homes hygiene is not practised amongst the non-European, so with no eye upon them, habits favourable to the spread of disease persist at his work;
(c) in a sub-tropical climate, non-Europeans are prone to bowel complaints which spread via the hand-to-food-to-mouth portal.

Experience proved that it was useless to tell food handlers that they could, by careless habits, pass on an unsuspected bowel complaint to a customer. He couldn't care less about the "other" fellow, so the application had to be directed to his family and himself. One of the boulders hindering that "up-hill" journey referred to earlier in this report is that the average non-European is impervious to the "who is my neighbour?" teaching. 142 lectures and demonstrations were given to 1,038 personnel during the year.

When the special immunisation unit visited hotels to inoculate food handler staffs against typhoid at certain centres, there was a core of resistance among Bantu handlers. A Bantu lecturer was able amicably to overcome resistance by dealing with the questions repeatedly asked -

(1) "Why should I, who am not sick, receive an injection?"
(2) "As it is free the European must be 'up to something' ".

The obstructionists all capitulated.

Typhoid

It is difficult to control disease amongst people who themselves do not recognise the need of self-control or of "considering their neighbour" in the matter of personal habits which they well know contribute to the spread of disease. For many years there have been, especially in Cato Manor, elements which have been the despair of all lecturers:-

(a) the tsotsis (Bantu Teddy-boys); and
(b) a type of Bantu women who in times of disturbance become intimidators.

They live a life completely abandoned to their own undisciplined whims, breaking any law or property for some obscure pleasure of their own, or out of wilful intent to damage. So of course there was typhoid in the area. Tsotsis with boulders and other implements of destruction repeatedly blocked and broke sewers so that sewage flowed freely over the soil on which children played and adults walked. Women stuffed lavatory pans with items they well knew would block pipes. Great patience was exercised by the authorities and special horn hailer talks were repeatedly given by Bantu lecturers around all ablution blocks throughout the area. Danger to public health was explained with great simplicity as well as how typhoid and bowel diseases could infect the community. What happened? With marginal exceptions, the tsotsis continued their anti-social behaviour and the women continued on their unrelenting ways. After all, they didn't pay the stunning sums for repairs, and if someone got ill that someone "was in a far country to them" (a Zulu proverb indicating it was not their concern).

Within the Council room among Bantu lecturers we faced this insensate destruction with "why?". Could we channel the thinking of those people to alter their behaviour?

The Fact of "Claim"

"Why?" It was agreed that when two persons or communities confront each other there has to be a recognition of what may be called a claim; each is under constraint to recognise that claim; each has a claim on the other. In an over the fence gossip it would be called neighbourliness.

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Burrowing into Bantu tradition, lecturers said that this claim had been a clearly defined obligation in their rural communities - between hut and hut of the same kraal, between kraal and kraal of the larger community, regardless of chieftainship. For instance, if the cattle of one kraal damaged a crop of a neighbouring kraal, as far as possible restitution was immediately made, and the herd boy responsible for carelessly allowing the cattle to stray on the neighbour's fields, could be punished by anyone. This 'claim' ethic dug deeply into the soil of kraal life. The abrogation of a claim would cause a feud culminating in a violent faction fight: men had to be taught, had they not, that "they cannot go against the grain of the universe and not get splinters?' What has happened to this fundamental sense of claim in the City Bantu, that wanton destruction is often now his primary re-action and not restitution? Take for instance, in Cato Manor, the Municipality recognised the claim of the Bantu, unexpressed by them, to the sanitary facilities which would prevent disease in their community: the City Engineer provided the services. The Bantu did not recognise the claim of the Municipality that the properties thus provided should be valued and preserved - sewers could be broken, blocked, damaged ad nauseaum. It did not even come into their thinking as a 'for' or 'against' problem; there was no weighing in the balance because without the recognition of the claim there could be no balance!

"Do Not Pass By - Lend a Hand" (Zulu proverb)

Why has this obligatory claim disappeared from Bantu life in Urban areas? The lecturers were unanimous that the basic reasons were:

(1) Bantu life in the City was divorced from responsibility;
(2) Work-shy Bantu become destroyers.

(1) No Responsibility

In the kraal days the people were integrated into the tapestry of community living. For instance, weeding was shared from kraal to kraal: thatching of huts likewise and ploughing and building. When a new well was to be dug, the community shared its labour. They dug it together and each felt responsible for guarding it from pollution and each felt free to punish an offender. They were 'involved' in each other's properties and affairs hence the Zulu proverb "A ku dhluliwa ngendhlu yakiwa" - "you must not pass by when you see a hut being built, you must lend a hand", was transmuted into a habit.

(2) Work-shy People

There were no tsotsis at the kraal, neither were their women idle. The latter gathered wood, often at a distant forest, carried water sometimes for miles, ploughed, weeded and worked through to sunset. The men hunted, cut wood, built huts and cattle kraals.

In Cato Manor, tsotsis and lawless women have not been 'involved' in the labour of providing amenities: everything is impersonal compared with kraal life. The Chief, National Office of Vital Statistics, Public Health Service, Washington says: "social man, in his many forms and varieties needs a common 'magnetic pole' by which to guide his course so that the course of one group will not be harmful to that of another group". In Cato Manor there are those who have found a 'magnetic pole' but to the tsotsis and women who in the riots became the intimadators of the law abiding, who broke sewers and lavatory pans, who do not want a 'pole' to such, teaching was vain. but not without hope. In order to try and "reach" these people a film strip was made.

Typhoid Production 35 mm: 32 frames (Bantu)

The environmental setting was Cato Manor and the colour transparencies focussed attention on the dangers of blocked and broken sewers which,

when they overflow, infect the ground. Flies were found 'guilty' of carrying disease, the practice of washing eating utensils at an ablution block and leaving them on infected soil to dry was condemned, and warning was given not to use polluted river water for drinking or washing purposes. There were reminders of the free service provided by the Department for immunisation against typhoid. Completed in November, it was screened 33 times in Bantu Housing Schemes before Christmas to audiences numbering 4,345.

Routine

In the pattern of routine work for 1959, the three major drives were centred on tuberculosis, gastro-enteritis and venereal diseases.

Tuberculosis

Talks	1,876
Film Shows	120

Gastro-enteritis (Infants)

Talks	756
Demonstrations	111
Slide Showings	56

Venereal Diseases

Talks	1,419
Film Shows	16

Instruction to domestic servants and work at the Bantu Administration Department are two important aspects of the programmes.

Domestic Servants

These are served by the daylight cinema van during their lunch hour, 2 - 3 p.m. Food handling has been the major subject but it has been necessary to include also dirty feeding bottles because many of these women become mothers of illegitimate infants, the child being left with a guardian while the mother continues working. Many kwashiorkor cases have been found among the infants of unmarried domestics.

Bantu Administration Department

Daily a lecturer talks to all registering males and the increasing number of women seeking employment. Many suspected cases of venereal diseases, tuberculosis and bilharzia have been chanelled to clinics.

South African Broadcasting Corporation: Bantu Health Talks

Each week for eight months a series of health talks for Africans has gone over the air, preceded by its own signature tune. The talks were a continuation of the series commenced in 1958. Each scripted subject broke new ground. Tetanus Neonatorum, Wise Spending, Baby Feeding and Typhoid were amongst the themes covered. Owing to pressure of work the series was reluctantly brought to a close. Well known Bantu broadcasters on the staff of the South African Broadcasting Corporation expressed considerable regret at the conclusion of a programme which they considered had been of great benefit to the Bantu community. They had received many tributes from rural as well as urban areas.

Over the Border

There were other over the border services - those beyond the confines of the Municipal boundary: they included:-

Queensburgh

This young, neighbouring borough applied for assistance in promoting a health campaign. Five evening film sessions were held spread over five weeks and were divided between Europeans, Bantu and Asiatics. The Deputy City Medical Officer of Health, at a European session on bilharzia exhibited specimens of snails which carry the disease parasite and answered questions. At the screening of "From Pastures to Pasteurisation" the Veterinary Medical Officer gave a talk and answered questions. The largest attendance was at the Bantu venue. The impact was sensational. They had never before seen health films with Bantu cast to the accompaniment of a live Zulu commentation. They wanted more! The Asiatic show was equally successful - the hall filled to capacity and overflowing.

Are Europeans satiated with films? - their neighbours' travel films, entertainment films? We do not often find enthusiasm for instructional films unless it is with women's groups.

Royal Agricultural Show: Pietermaritzburg

In co-operation with the Natal and East Griqualand Fresh Milk Producers' Union and Durban and District Milk Distributors' Association, the section was on duty in the capital at the 'Royal' for the week of its duration. Appropriate films were shown daily to a total of 2,733 visitors - the shows being 59.

Visitors

Ex Caronia

Dr. C.Ronan of Boston, U.S.A., was shown excerpts from departmentally produced films for non-Europeans. She was a most rewarding visitor, who studied the daily programmes, met the non-European staff and engaged in discussion at a high level over problems encountered on the field. As she left she said "I shall never forget what I've seen, the unusual techniques, the apt adaptations of material to the situation and, above all, the small staff covering such large areas with a vast population and almost heart-breaking difficulties".

Ex Onderstepoort

By request, final year veterinary students from Onderstepoort were given a special session on milk, including the Department's film "From Pastures to Pasteurisation".

World Health Organisation

The Public Information Officer of the World Health Organisation at Brazzaville, formerly of Geneva, visited the Department for the purpose of studying health education techniques evolved by it and incorporated in its teaching programmes. Mr. Wilde said he "found the development of health education amongst the Bantu and Indian people of Durban to be unique in many respects. It certainly showed a pattern of great interest to health authorities on the African continent". Mr. Wilde was given special permission to release to a syndicated press of 700 publishers extracts from two sections of the health educator's former annual reports. After the release, request was made for certain pictorial illustrations for publication in South Africa.

And Now to the Asiatics
(There are only two lecturers, one Senior, one Junior, to an estimated population of 205,543).

Reviewing eleven years' work amongst the Indian folk, there is much to encourage, especially in the increasing response of women to health

teaching. At first the lecturer over the loudspeaker would tell his story into apparent void, or the blank facades of innumerable houses, his female audience for the most part being invisible. A closer scrutiny would reveal a shy face peeping through the parted curtains; or the drapery of a colourful sari in the shadow of the door. This picture has largely disappeared. Instead through daylight film services and patient friendly approaches, through the comfort which immunisation has given the family, and the help of clinics, Health Education personnel are now accepted and welcomed as a kindly relative! The language media employed vary. Where necessary Gijarati, Tamil or Hindustani are used. For younger men and women the English medium is used.

There has been a notable response among Indian women to teaching on nutrition and balancing the diet. Lecturers, observing the buying habits of women, found there were a far greater number purchasing the cheap cuts consistently taught by the Department such as sheep heads, trotters, offal and tripe (all uncleaned because they are 50% cheaper than the cleaned). These trends are noticed especially in shack areas, where also there is an increased consumption of fish heads in the form of stew, soup and curry. The shack areas of the Indian are cleaner than the Bantu, because the women have responded to the continuous teaching on refuse dumping and its evils. It is a common sight to see Indian women cleaning their bit of land.

Schools, housing schemes, shacks, factories and eating establishments are the chief sections catered for. With a population of 205,543 and only two lecturers, the task is heavy, but the results are rewarding.

Health education work is closely linked with social work. The senior Indian lecturer during the year found nine destitute aged widows, unaware that they could obtain assistance from the Indian Immigration Office. Through his efforts one after another received grants and proudly showed him their documents. Work was found by him for six girls of poor families, and child welfare grants were obtained for others. These incidentals representing a letter or phone call, took little time but whispered throughout the communities, were not without a beneficial effect on his normal duties.

Immunisation: Confused Thinking: New Film Production

Asiatic and Bantu communities make a great response to the loudspeaker programmes on immunisation by flocking to the Immunisation Unit when places and times have been announced. At kwaMashu, for instance, over 1,000 responded to the polio immunisation 'call' so that extra supplies of vaccine had to be rushed to the inoculation centre. But there is much confused thinking amongst non-Europeans in spite of explicit teaching. For example:-

(a) they often assume an injection will cure all diseases, whereas it is a preventive measure for one disease only;
(b) it is assumed that a preventive injection will prevent ALL the communicable disease in one shot;
(c) frequently they fail to return for the second and third injections hoping that somehow they will 'get by' with the first.

To combat these fallacies, a series of colour transparencies was made setting forth the story of immunisation against typhoid, diphtheria, poliomyelitis and smallpox. It was dual-purposed having both a Bantu and Asiatic cast thus saving the production of two separate films for the two races. The set illustrates why it is essential that first injections must be followed by the second and third; it distinguishes between prevention and cure, and urges people to remember what diseases they have been protected against in order that they should not, inadvertently, be twice protected against one disease. They are told "you must know what muti is in your body and what disease it prevents".

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New Daylight Cinema Van

A second daylight cinema van was designed and purchased to share with No. 1 in the promotive and preventive health programmes in which it has functioned so successfully. The carrying power of its voice is stronger than No. 1.

Uniforms

The khaki-clad lecturers were so akin to messenger/delivery men that it was decided to provide a green uniform in safari style. Sartorially they are now both more impressive and distinctive in their green tailoreds.

Making Them Aware

"Some are born ill: many have illness thrust upon them: but most achieve illness through their own way of living".

One of the aims of our programmes is to create an awareness of their situation in the minds of the people of whatever race, and then get them to want to change views and ways already set, and to make them want it so much that they will succeed. In the case of the Bantu, however, although they still thrill to the throwing of the witch doctor's bones and the slaying of the sacrificial goat, it is emerging that the bones have lost their power and the smell of the goat is not so sweet.

Memory Held the Door For The Child

Two years ago a Bantu child unnoticed in a crowd at Cato Manor viewed a tuberculosis film. Recently at the kwaMashu township the same child, now aged ten, approached the daylight cinema van and asked if the tuberculosis film was to be shown. The child could tell the full story of the film not omitting any vital point.

"Muntu-ness"

Only Africans will fully appreciate the unsolicited testimony from a Bantu mother in a crowd after a demonstration on feeding bottles: "what you people say" she said "is so plain that we cannot fail to take it in. We will only fail because we are Bantu: as you know, a muntu is a muntu and the muntu-ness will never leave us"!

The path to knowledge is up-hill, the tempo slow, but the Bantu are travelling upwards toward fuller knowledge of health.

Although Cato Manor has been the focus of this report thus far, there are areas which are rewarding fields of labour. In kwaMashu, the new Bantu township to which hundreds of Cato Manor folk have been transferred, the daylight cinema always gets an eager audience. From the commencement of the work the dominant theme of most programmes has been - the importance of attendance at the mother and baby clinics. On all child health matters the saga of the lecturers is "the clinic will guide you". Umlazi Glebe and Lamontville townships for Bantu have a listening ear and a readiness to learn, often expressed in the question "and what are you going to teach us to-day?".

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XVI. MATERNAL AND CHILD HEALTH

The work in the Maternal and Child Health Section has increased steadily since it was inaugurated by the City Council in 1920.

Maternal Health

(a) Ante-Natal Clinics

Ante-natal clinics were held throughout the year for mothers of all races who did not intend to have a medical practitioner in attendance at the time of the confinement. The attendance at these clinics remained low, as most mothers either went into hospital or made use of the district midwifery services provided by the following institutions:

European
Addington Hospital: (Natal Provincial Administration)
Mothers Hospital

Coloured
Addington Hospital: (Natal Provincial Administration)
McCord Zulu Hospital

Bantu
King Edward VIII Hospital: (Natal Provincial Administration)
McCord Zulu Hospital

Asiatic
King Edward VIII Hospital: (Natal Provincial Administration)
McCord Zulu Hospital.

(b) Supervision of Midwives

A Health Visitor supervises the work of registered midwives in private practice, and investigates any cases of still births, puerperal sepsis and ophthalmia neonatorum which might occur in their practices.

Four trained midwives ceased to practice privately during the year, of whom three retired, and one, an Asiatic, finding it difficult to obtain sufficient cases, returned to hospital duties.

There is a prejudice amongst the community regarding the employment of young trained midwives when the services of older women are available, whether they are trained or not.

Amongst the poorer Asiatic community the mothers favour having the services of the uncertified women, because their fees are considerably lower than those of a trained midwife.

Set out below are details of the number of births attended by midwives only, as compared with the number of midwives on the list kept by the local authority:

	E.	C.	B.	A.	Total
Registered midwives	8	3	2	-	13
Unregistered Midwives	1	4	7	121	133
	9	7	9	121	146

Total number of births attended by midwives:

	E.	C.	B.	A.	Total
Registered Midwives	183	320	211	298	1,012
Unregistered Midwives	6	9	36	2,594	2,645
	189	329	247	2,892	3,657

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(c) Accommodation for Maternity Cases

Accommodation for maternity cases is provided by the following hospitals and nursing homes:

Europeans
Addington, Mothers' and St. Augustine's Hospitals and Parklands Nursing Home

Coloureds
Addington, McCord Zulu and St. Aidan's Hospitals

Bantu
King Edward VIII and McCord Zulu Hospitals

Asiatic
King Edward VIII, McCord Zulu and St. Aidan's Hospitals.

Report by Medical Specialist in Charge of Clinics (Dr. L.Raftery, M.R.C.O.G., M.R.C.S.,L.R.C.P.)

"The last year has shown yet a greater increase in the number of expectant women attending the clinics. Many of them now attend from as early as the third month of pregnancy, which is a great advantage from the point of maintaining the health of the mother and early detection of any conditions of health of the mother, which might affect the health of the unborn baby. One of these conditions is anaemia, which is very prevalent and often severe in the poor Indian women. We are grateful that we are now to have the facilities afforded to us of assessing the degree of anaemia by blood counts, where it is considered necessary.

It is my impression that the mothers are more ready now than previously, to accept our opinions as to when they should be referred to hospital, when we find an abnormal condition to be present, but it is still true that the work of the Health Visitors is invaluable in getting our wishes carried out. The District Midwives continue to make good use of the services we provide and there appears to be a very good feeling between us.

The Gale Street European and Coloured Clinics have become well enough attended to necessitate two clinics a month being held, and here also the mothers and their midwives appear pleased with the services that we render to them.

Once more I wish to pay tribute to the excellent work done by the Health Visitors and the Health Assistants, who work with me at both Gale Street and Brook Street and I wish personally to thank the Medical Officer of Health and the Chief Health Visitor for their constant and ready approachability and help at all times."

Child Health

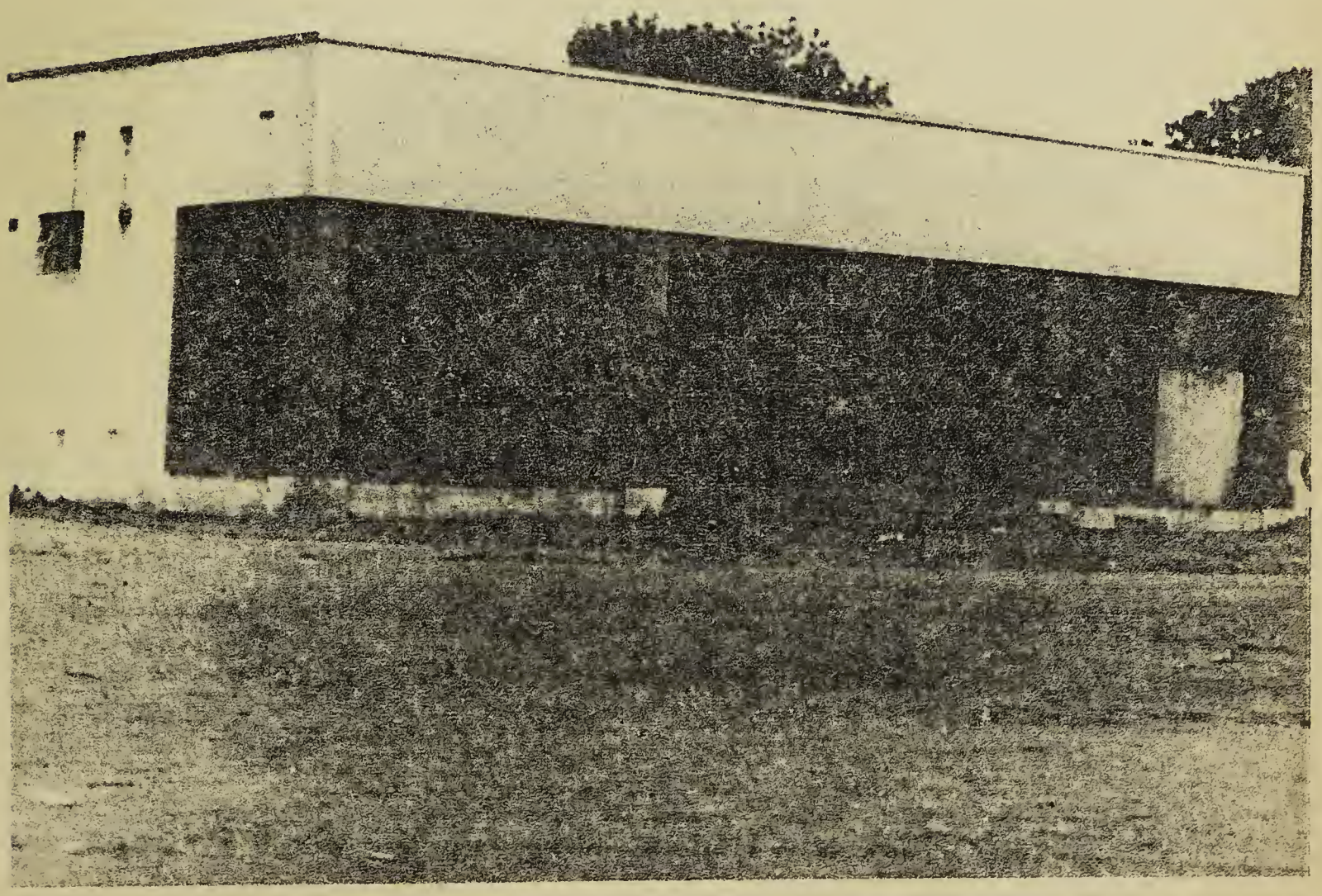
The child health clinics, which are held in various parts of the City, have been very well attended during the year. The function of these clinic services is health education for expectant and nursing mothers and mothers of children up to the age of five years.

New Clinics

Only one new clinic was established during the year, namely for the Coloured community living in the Sparks Estate Coloured Housing Scheme.

PERSONAL HEALTH SERVICES

SESSION AT SPARKS ESTATE COLOURED CLINIC



TUBERCULOSIS CLINIC AT CATO MANOR BURNT OUT DURING BANTU RIOTS

The Committee of the Coloured Memorial Community Centre agreed to erect, out of its own funds, a clinic building on its premises at St. Theresa's Road.

In the meantime, as a temporary measure, authority was obtained to use the main hall of the Memorial Centre for clinic purposes. The clinic which was commenced in July operates on Thursday mornings, and was very well patronised by the Coloured community.

During the course of the year plans have been prepared for various other new clinics, i.e. Springfield Indian Housing Scheme, Sparks Estate Coloured Community Centre, Warwick Avenue and the new Municipal block in Old Fort Road but by the end of the year none of these had been taken beyond the stage of planning.

kwaMashu Clinic

Clinic sessions were initially held three times weekly, but as the year progressed attendances increased to such an extent that it was necessary to increase the number of sessions. From November, daily clinic sessions were held.

Brook Street Clinic

For many years past the working conditions at the above clinic have been unsatisfactory. The building has become too small for the large number of Asiatic and Bantu mothers who attend the clinic. Several sites have been inspected, but none of the alternatives have proved practicable. During the year negotiations took place for the transfer of the clinic to a vacant Municipal property in Lancers Road, but the matter had not reached finality.

Chesterville Clinic

This clinic, which is held on Tuesdays and Fridays in the Community Hall, has been conducted by three Bantu Health Visitors since the riots in June, 1959. Periodical checks were made, and it is pleasing to note that the mothers are attending regularly.

A summary of the year's activities is set out hereunder.

(a) Sessions Held

	1955	1956	1957	1958	1959
European	922	873	843	928	1,000
Coloured	166	167	154	166	190
Bantu	908	872	838	967	1,007
Asiatic	472	485	475	456	486
Total	2,407	2,397	2,310	2,517	2,683

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(b) Attendances

	1955	1956	1957	1958	1959
European	32,368	36,559	38,408	48,525	53,758
Coloured	8,469	9,142	9,598	11,195	14,252
Bantu	88,213	92,927	89,597	89,037	121,475
Asiatic	37,169	39,312	46,213	48,267	63,653
Total	166,219	177,940	177,816	197,024	253,138

Medal Awards to Student Nurses: Addington Hospital

The Gold and Silver Medals which have been awarded annually since 1957 to the two most outstanding student nurses at Addington Hospital were awarded as follows:

Gold Medal - Student Nurse A.M.Venter
Silver Medal - Student Nurse M.F.Gregory

Gastro Enteritis

For many years records have been kept of cases of infantile diarrhoea seen at Bantu Clinics. At first it was unusual to see any cases in the early stages of the disease. This was due mainly to the ignorant use of home remedies and to the fact that many of the mothers were working. An older child without much sense of responsibility would bring a very sick child to the clinic. Medicines were given, but in many cases these were not administered. A routine follow up of all cases was carried out. General advice regarding cleanliness and personal hygiene was given. Notice was taken of the prevalence of flies in the area. Daily teaching at the clinics of all mothers to bring sick children to the clinic immediately for advice and help was carried out.

In the last two years a gradual change has been observed in the behaviour of mothers. There is a definite tendency to bring babies to clinics at an earlier stage in the disease, before dehydration has set in. This is to some extent reflected in the decreasing mortality from this condition, set out below:

Bantu gastro-enteritis deaths under one year		
Year	Number	Rate per 1,000 population
1957	763	4.26
1958	470	2.52
1959	464	2.389

Statistics

A statistical summary of the work of this Section is set out on the ensuing pages.

Attendances at Gale Street, Brook Street and Mobile Clinics: January to December, 1959

	European			Non-European				Grand Total
				Brook/Gale Street/Mobile Clinics				
	Gale Street	Mobile Clinics	Total	C.	B.	A.	Total	
Total number of sessions	235	765	1,000	190	1,007	486	1,683	2,683
Total sessions for children	223	765	988	177	967	390	1,534	2,522
Total ante-natal sessions	12	-	12	13	40	96	149	161
Total attendance at clinics	10,838	42,920	53,758	14,252	121,475	63,653	199,380	253,138
New cases out of above number	937	2,841	3,778	1,550	20,617	9,464	31,631	35,409
Total attendance of infants	6,318	20,464	26,782	5,150	46,632	21,266	73,048	99,830
Total attendance of toddlers and pre-school children	1,786	13,766	15,552	5,301	35,135	20,611	61,047	76,599
Total attendance of nursing mothers	2,675	8,690	11,365	3,763	38,632	17,624	60,019	71,384
Total attendance of expectant mothers	59	-	59	38	1,076	4,152	5,266	5,325
No. of test feeds given	44	104	148	8	24	4	36	184
No. of mothers instructed in treatment of minor ailments	471	1,566	2,037	1,226	49,122	8,868	59,226	61,263
No. of health talks and demonstrations given	1,061	2,804	3,865	1,216	15,401	4,898	21,515	25,380
No. of cases seen by doctors	2,284	2,670	4,954	1,747	169	2,962	4,878	9,832

Health Visitors' Work

Infants

		E.	C.	B.	A.	Total
First Visits - Feeding	Breast	1,039	482	915	4,640	7,076
	Mixed	130	30	369	531	1,060
	Artificial	451	17	154	315	937
		1,620	529	1,438	5,486	9,073
Re-Visits - Feeding	Breast	663	48	143	2,361	3,215
	Mixed	754	52	108	1,452	2,366
	Artificial	2,431	54	250	995	3,730
		3,848	154	501	4,808	9,311

Older Children

First Visits	648	205	2,110	4,929	7,892
Re-Visits	3,922	912	413	5,595	10,842
	4,570	1117	2,523	10,524	18,734

No. of above visits made to Protected Infants	249	65	-	-	314

Other Visits

Infant Deaths	13	-	23	8	44
Infectious diseases or contacts	-	1	7	3	11
Reports on Insanitary Conditions	8	-	41	7	56
No. of visits to Nursery Schools and Homes for Protected Infants	-	-	35	-	35
	21	1	106	18	146

Total Visits

First Visits - Infants	9,073
Re-Visits - Infants	9,311
Older Children	18,734
Other Visits	146
	37,264

	E.	C.	B.	A.	Total
No. of children found to be suffering from dental caries	59	14	9	316	398
No. of cases of dental caries which received attention	37	-	-	-	37

Health Visitor Students attending clinics - Europeans 10.

128 European Female Entrants to Service were medically examined.

Supervision of Midwives

No. of Registered and Unregistered Midwives on List
(Private Practising in Durban)

	E.	C.	B.	A.	Total
No. of trained midwives who have ceased to practice	2	1	-	1	4
No. of untrained midwives who have ceased to practice	-	1	-	7	8
No. of trained midwives deceased	-	-	-	-	-
No. of untrained midwives deceased	-	-	-	4	4
No. of women practising midwifery who have been warned not to do so unless they apply to have their names put on the list	-	-	-	15	15
No. of midwives prosecuted	-	-	-	-	-
No. of difficult cases attended to and delivered	-	-	-	-	-
No. of midwives put on the list during the year	-	1	7	7	15
No. of midwives reinstated during the year	-	-	-	-	-
No. of midwives appliances examined	24	21	7	1,091	1,143
No. of midwives bags replenished	-	33	14	2,096	2,143
No. of midwives dressings sterilised	-	46	-	2,755	2,801
No. of midwives dressings sterilised after septic cases	-	-	-	-	-
No. of visits to midwives at their homes or at patients' houses	1	9	5	308	323
No. of midwives who were warned for failing to comply with regulations	-	-	-	9	9

Certificated and uncertificated European and Coloured midwives appliances and registers are examined every three months.

Uncertificated practicising Indian midwives appliances are examined every month.

No. of Confinements attended by Midwives

Attended by	Registered	Unregistered	Total
European	183	6	189
Coloured	320	9	229
Bantu	211	36	247
Asiatic	298	2,594	2,892
	1,012	2,645	3,657

	E.	C.	B.	A.	Total
Registered Midwives	8	3	2	-	13
Unregistered Midwives	1	4	7	121	133
Ante-natal Clinics	12	12	40	96	160

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Ante-natal Work

	E.	C.	B.	A.	Total
Total attendance of expectant mothers	59	38	1076	4152	5325
No. of ante-natal sessions	12	12	40	96	160
No. of ante-natal visits	70	7	231	960	1268
No. of post-natal visits	8	7	2	1360	1377

Accommodation Available for Maternity Cases

		E.	C.	B. and A.	Total
Beds at:	Hospitals	50	30	231	311
	Nursing Homes	88	-	-	88

XVII. STAFF

Except in three categories, i.e. Senior Clinical Medical Officer (Venereal Diseases), Health Inspector and Non-European Health Assistant, no difficulty was experienced in maintaining the staff at the authorised establishment.

Despite repeated advertisement it was not found possible to make an appointment to the vacant position of Senior Clinical Medical Officer (Venereal Diseases).

The shortage of Health Inspectors, which has persisted for a number of years, was again manifested in four unfilled posts at the close of the year.

Recruitment of suitable personnel to fill vacancies for Indian/Bantu Health Assistant engaged in the field control of tuberculosis amongst the Indian and Bantu communities proved extremely difficult. It may be that the remuneration offered was insufficiently attractive and that aspect will be investigated in the coming year.

The undermentioned staff terminated service with the Department:

Resignations

Dr. R.S.Dewar	Senior Clinical Medical Officer (Venereal Diseases)
Miss S.Edmeades	Clinic Sister
Miss W.M.Gregg	" "

Retirements

Mr. G.F.Groom	Chief Health Inspector
Mr. G.J.V.Aitkenhead	Health Inspector

Transfers

Dr. F.E.Cavanagh, B.V.Sc.	Veterinary Medical Officer, appointed to post of Abattoir Director.

Mr. J.W.A.Johnson	From Health Inspector to post of Meat Inspector at the Municipal Abattoir.
Mr. F.W.J.Wessels	From Meat Inspector, Municipal Abattoir to Health Inspector.

Appointments to the staff included the following:

Dr. A.J.Louw, B.V.Sc.	Municipal Veterinarian, Bloemfontein, to the post of Veterinary Medical Officer.
Dr. M.Wagener, B.A., M.B., B.Ch.	To the post of Part-time Clinical Medical Officer.
Mrs. D.J.Watts	To post of Health Visitor
Mrs. J.E.Holmes	To post of Health Visitor
Mrs. K.J.Hardman	To post of Clinic Sister.

The following promotions took place:

Mr. M.M.Johnston	From Deputy Chief Health Inspector to Chief Health Inspector.
Mr. A.Clayton	From Senior Health Inspector to Deputy Chief Health Inspector
Mr. J.K.Harris	From Health Inspector to Senior Health Inspector.

Additional Staff

A proposal to increase the anti-rodent staff, which had been held in abeyance pending revision of the salary grades for the Municipal service, was given further consideration by the Municipal Service Commission. Unfortunately, the Commission's recommendation to Council that the staff be increased by three positions of General Assistant coincided with the City Council's decision to conduct an economy and efficiency investigation into Municipal Departments. In the circumstances the Economy and Efficiency Committee resolved that the recommendation be not proceeded with at that stage and that the City Medical Officer of Health be requested to include this item in his economy and efficiency report for submission to that Committee in due course. Appropriate steps in that connection were taken.

The City Council authorised the creation of the undermentioned additional posts and the approval of the Secretary for Health for part-refund purposes in terms of the Public Health Act was obtained where necessary:

Epidemiology Section

European

Senior Clinical Medical Officer	1)	
Operator: X-Ray (Male)	1)	For proposed Cato Manor
	)	Tuberculosis Clinic
Bantu	)	
Female Nursing Assistant	2)	
Labourer	1)	

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Health Visiting Section

European

Clinic Sister	1)	For proposed Cato Manor Tuberculosis Clinic
Administration Section	)	
Bantu	)	
Clerk (Grade II)	1)	
Clerk (Grade II)	1	Allocated to Epidemiology Section (T.B.) at Headquarters.

Staff Establishment

At the close of the year this was:

Section and Position	No.	Incumbent/Remarks
City Medical Officer of Health	1	Dr. G.D.English, M.B., Ch.B., D.P.H., D.T.M. & H.
Deputy City Medical Officer of Health	1	Dr. A.Stephen, M.B.E., B.Sc., M.B., Ch.B., D.P.H.
Assistant Medical Officer of Health	1	Dr. C.R.Mackenzie, M.B., B.Ch., D.P.H., D.T.M. & H.
Administration		
(a) European		
Principal Assistant (Admin.)	1	Thomson, A.H. (M.R.S.H.)
Senior Assistant (Financial)	1	Donkin, F.D.
Senior Assistant (Technical)	1	Poplett, D.J. (M.R.S.H.)
Chief Clerk	1	Kibble, G.A. (Cert. R.S.H.)
Senior Clerk (Grade II)	1	
Senior Clerk (Grade III)	2	
Clerk (Grade I)	3	
Clerk (Grade II)	1	
Clerk (Grade III)	7	
Principal Lady Assistant	2	
Senior Lady Assistant	2	
Lady Assistant	8	2 posted to Immunisation Service
Senior Typist	2	
Typist	5	
General Assistant (Unestablished)	1	
(b) Non-European		
Bantu Clerk (Grade II)	2	Posted to Epidemiology Section: One for Cato Manor T.B.Clinic - Vacant.
Office Assistant (Indian)	1	
" " (Junior) "	1	
Messenger/Cleaner Indian/Bantu	6	

Section and Position	No.	Incumbent/Remarks
Epidemiology (embracing tuberculosis, infectious diseases and venereal diseases control)		
(a) European		
Senior Clinical Medical Officer	1	Vacant
Operator - X-Ray (Male)	1	Vacant
General Assistant (2nd Grade)	1	
Note: The following staff is posted from the Health Visiting and Health Inspection Sections for full-time duty in this Section:		
T.B.Control:		
5 Health Visitors		
1 Health Inspector		
I.D. and V.D.Control		
1 Senior Health Inspector		
1 Health Visitor		
(b) Non-European		
Health Assistant Indian	5	
" " Bantu	15	
Female Nursing Assistant Bantu	2)	For Cato Manor T.B. Clinic
Labourer Bantu	1)	Vacant
Health Inspection		
European		
Chief Health Inspector	1	Groom, G.F., Public Health Inspectors and Meat and Other Foods Certificates of the Royal Society of Health (Retired 31st August, 1959). Johnston, M.M. (with effect from 1st September, 1959)
Deputy Chief Health Inspector	1	Johnston, M.M. Public Health Inspectors Certificate of the Royal Society of Health. Clayton, A. (with effect from 23rd September, 1959).
Senior Health Inspector	10	Ashdown, N.D. Public Health Inspectors and Meat and Other Foods Certificates of the Royal Society of Health.
Note: Positions allocated to District and Food Hygiene (6) Epidemiology (1) Dairies (1) Field Hygiene (1) Plans and Housing (1)		Bannon, J.D.)Public Clayton, A.)Health In- Clemenson, J.L.)spector's Crickmore, C.R.A.)Certificate Harris, J.K. (with effect from 17th November, 1959))of the)Royal Society)of Health Hornby, A.V.) Ingram, W.A.) Smith A.M.) Thomas, L.E.H., Public Health Inspectors, Meat and Other Foods and Tropical Hygiene Certificates of the Royal Society of Health.

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Section and Position	No.	Incumbent/Remarks
		Young, B.J. Public Health Inspector's and Tropical Hygiene Certificates of the Royal Society of Health.
Health Inspector	37	Aitkenhead, G.J.V. (retired 18th August, 1959)
Note: Allocated to:		Alder, C.H.
District and Food Hygiene 32		Atkinson, C.E. Benians, P.E.
Dairies 3		Butler, M.W., Clark, A.G.
Plans 1		de Villiers, P.D. de Beer, H.H.
Epidemiology (T.B.) 1		Green, C.E.O., Harris, J.K.
37		*Hazle, A.D., Hogan, J.P.
		Horton, D.H., Hull, V.H.
		Johnson, J.W.A. (1.1.59 to 31.8.59), Knowles, D.H.
		Khaled, R.A.C., Marsh, H.N.
		*McLean, J.L., McIver, E.I.
		Phillips, L.G.F.,
		*Roberts, K.W.C., Roberts, A.J.L.
		Schou, M.S., *Spencer, D.W.,
		Sutherland, F.J., Vorster, J.H.
		Weldon, F.J., Wessels, F.W.J. (with effect from 1.7.59),
		Woolley, G.W.R.,
		Worthington, C.
		All hold the basic Public Health Inspectors Certificate of the Royal Society for the Promotion of Health. Certain of the above personnel also hold the Meat and Other Foods and Tropical Hygiene Certificates.
		*Also appointed to a panel of Health Inspectors for emergency duties at the Municipal Abattoir, as and when required.
		No. of vacancies: 4
Health Assistant	6	Learner Health Inspectors.
General Assistant (1st Grade)	5	Engaged full-time on rodent control.
Veterinary Hygiene		
European		
Veterinary Medical Officer	1	Dr. A.J.Louw, B.V.Sc with effect from 5th January, 1959
Laboratory Assistant	1	
Lady Assistant	1	Re-designation - hitherto Laboratory Assistant
Field Hygiene		
(a) European		
Supervisor	1	Nourse, A.D.
General Assistant	9	

Section and Position		No.	Incumbent/Remarks
(b) Non-European			
Clerk	Bantu	1	
Field Assistant	Indian	5	
Health Assistant	Bantu	2	
Spotter (Mosquito)	Bantu	9	
Labourer: Indian and	Bantu	93	Includes 5 supernumery positions.
Health Visiting			
(a) European			
Chief Health Visitor		1	Eckhoff, Miss E.J. Medical and Surgical, Midwifery, Mothercraft and R.S.H. Health Visitors and School Nurses certificates.
Senior Health Visitor		1	Robinson, Miss S.E.H. Medical and Surgical, Midwifery, Mothercraft and R.S.H. Health Visitors and School Nurses certificates.
Health Visitor		26	Anderson, Miss E.M., Barker, Mrs. M.I., Brown, Miss M., Burdon, Miss C.W., Dolkens, Mrs. S. Edmeades, Miss M., (resigned with effect from 9.1.1959), Essery, Miss M., Hamlyn, Miss E.F., Harding, Miss E., Holmes, Mrs. J.E. (with effect from 27.4.1959) Hook, Mrs. E.M.Longmore, Mrs. F.B. Maloney, Miss K., Meverstein, Mrs. S., Mitchell, Miss B.I., Muller, Miss M., Norman, Miss F.M. Poulton, Mrs. M.P., Rankin, Miss E., Schwarz, Mrs. C., Stead, Mrs. R.J., Taylor, Mrs. J.S. Watts, Mrs. D. (with effect from 15.4.59), Webb, Mrs. M.E. Whiting, Miss A., Wilde, Miss M., Wilson, Mrs. D. All suitably qualified and registered medical and surgical nurses. No. of vacancies: 1
Note: Sectional allocation of posts:			
Family Health Service:	17		
Epidemiology			
T.B.Control	5		
I.D. and V.D.	1	6	
Immunisation		3	
		26	
Clinic Sister		6	Gregg, Miss W.M. (Resigned with effect from 28.2.1959), Hunter, Miss J.W., Pettigrew, Mrs. E. (temporary), Thomas, Mrs. D., Watts, Mrs. D.J. (temporary), Hardman, Mrs. K.J. (with effect from 15.4.1959), Laue, Mrs. H. (with effect from 1.7.1959). All suitably qualified and registered medical and surgical nurses.
Note: Sectional allocation of posts:			
Family Health Service	3		
Immunisation	2		
Epidemiology	1		
	6		
Clinic Assistant		9	

Section and Position	No.	Incumbent/Remarks
(b) Non-European		
Health Visitor: Coloured	1	Post vacant
" " : Bantu	11	Incumbents suitably qualified and registered medical and surgical nurses.
Female Nursing Assistant: Bantu	4	1 vacancy
Female Nurse Aid: Indian	7	
Clinic Orderly: Bantu	1	
Interpreter/Cleaner: (Female): Bantu	1	
Messenger/Cleaner: Indian/Bantu	7	1 vacancy
Watchman: Bantu	2	
Immunisation		
Note: European staff comprising 3 Health Visitors, 2 Clinic Sisters and 2 Lady Assistants is posted from the Health Visiting and Administration Sections on a full-time basis.		
Non-European		
Immunisation Assistant: Indian	1	
Health Assistant: "	2	
Health Assistant: Bantu	3	
Family Health (Child Hygiene) Service		
European		
Clinical Medical Officer	1	Dr. H.A.B.Pletts, M.B., B.Ch.
Part-time Clinical Medical Officer	1	Dr. M.Wagener, B.A., M.B., B.Ch. with effect from 10.1.1959.
Part-time Medical Specialist	1	Dr. L.Raftery, M.R.C.O.G., M.R.C.S., L.R.C.P.
Health Education		
(a) European		
Health Educator	1	Goddard, Miss E.
Technician	1	Godfrey, D.M.
General Assistant (2nd Grade)	1	
(b) Non-European		
Lecturers (1 Indian and 2 Bantu)	3	1 Bantu post vacant
Lecturer (Junior): Bantu	2	1 post vacant
" " "	1	Employed full-time on nutrition education of the Bantu. Full refund of expenditure on this post granted by Union Department of Nutrition.
Assistant Lecturer: Indian	1	
Health Assistant: Bantu	1	
Non-European Health and Medical Services: V.D. Clinic Staff		
(a) European		
Senior Clinical Medical Officer (City Venereologist)	1	Dr. R.S.Dewar, M.B., Ch.B. (Resigned with effect from 2.4.1959).
Clinical Medical Officer (Female)	1	Dr. M.McAuliffe, L.A.H., L.R.C.P.S.I.

Section and Position	No.	Incumbent/Remarks
(b) Non-European		
Bantu Medical Officer	1	Dr. C.N.Dhlamini, L.R.C.P., L.R.C.S., L.R.F.P.S.
Nurse: Bantu	4	All suitably qualified and registered medical and surgical nurses.
Clinic Orderly (Senior) Bantu	1	
Sideroom Worker (Unqualified) Bantu	4	
Clerk "	4	
Labourer "	1	Vacant
Medical Bureau		
European		
Senior Clinical Medical Officer	1	Dr. M.Casson, M.D., M.R.C.S., L.R.C.P.

TOTAL STAFF ESTABLISHMENT

European - 168 (including 2 part-time medical posts)

Non-European - 207 (including 5 supernumery labourers)

375

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REPORT 'B' HOUSING

1. European Housing

Considerable housing development has taken place during the year both in the form of blocks of flats and single dwelling units.

Although rentals are generally high there have been rent decreases in certain blocks, comprising luxury and bachelor flats.

There is a large number of flats and houses vacant throughout the City and enquiries reveal a demand by middle and low income groups, families, for three and four roomed units with a rental of under £15. 0. 0. per month. The reason then for the number of vacant flats is their high rental and low housing capacity.

It can be accepted that the housing needs for Europeans has been met other than for the low income group. Such housing can only be provided out of funds provided by the State.

Summary of European Housing as at 31st December 1959 (since inception of housing programme)

A. Economic

	Houses	Flats
Selling schemes completed	1,672	-
Selling schemes under construction	-	-
Economic assisted	1,897	-
Economic letting	-	674

B. Sub-Economic

Letting (aged poor)	50	-
National Housing Letting (Women of limited means)	-	55
	3,619	729

Housing units completed in 1959	91
European population (estimated)	157,848
Percentage of total population	26.74

C. Applications for Corporation Assisted Housing

As at 31st December 1959, the number of housing applications on hand was as follows:

Purchase Schemes	1,167
Letting Schemes	2,874

2. Coloured Housing

The Coloured population of the City is relatively small and only represents 4.43% of the City's total population. However, a great majority of them are employed in trades and enjoy a wage that permits them to qualify for Council built houses.

Because these units have been in small supply many families have been forced to rent rooms in the Indian areas, with consequent overcrowding.

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Relief is expected shortly, as the Coloured housing scheme at Merebank has been commenced, and units should become available during the forthcoming year.

Summary of Coloured Housing as at 31st December, 1959 (since inception of housing programmes)

A. Economic

	Houses	Flats
Selling schemes completed	291	-
Economic Assisted	128	-

B. Sub-Economic

National Housing Letting	49	64
	468	64

Housing units completed in 1959	10
Coloured Population (Estimated)	26,168
Percentage of total population	4.43

C. Applications for Corporation Assisted Housing

As at 31st December, 1959, the number of housing applications was as follows:

Purchase Schemes	458
Letting Schemes	206

3. Indian Housing

The housing of the Indian population of this City presents one of the most pressing problems of the City. Of the total Indian population only a very small percentage can afford to pay economic rentals. Moreover, most Indian families are large, and the combination of low income and large family renders many of them quite unable to meet the cost of proper housing.

In consequence, many such families, weary of being crowded into rooms in backyards, have resorted to the illegal erection of shacks on privately owned properties. The resulting shack settlements are lacking in all the necessary sanitary, water and refuse services.

The City Council, fully aware of the requirements of this section of the community has pressed forward with the Merebank Indian housing scheme where the development has been rapid. However, the full impact of this scheme, which when completed will provide 4,000 units, will only be felt in the forthcoming year.

In addition, the City Council on 6th July, 1959 resolved to proceed with a large Indian Housing Scheme in the Umhlatuzana area, and application was formally made to the National Housing Office for permission to acquire land in terms of the Housing Act.

The Scheme envisages the development of approximately 8,900 acres, 6,100 of which will be used for the housing scheme itself, and will provide for approximately 20,000 dwellings when completed. Preliminary work on a photogrammetric survey of the area had been commenced by the end of the year.

Summary of Indian Housing as at 31st December, 1959 (since inception of housing programme)

A. Economic

	Houses	Flats
Selling schemes	759	-
Economic Assisted	477	-
B. Sub-Economic		
National Housing	819	-
	2,055	-

Indian Population (estimated)	213,675
Percentage of total population	36.21
Housing units completed in 1959	55

C. Applications for Corporation Assisted Housing

As at 31st December, 1959, the number of housing applications was as follows:

Purchase schemes	3,670
Letting schemes	1,277

4. Bantu Housing

(a) kwaMashu: The development of this model village has progressed favourably during the year and it is difficult to imagine that this was a sugar estate just a few years ago.

To date there are 2,373 dwellings completed and occupied. These dwellings (two and four roomed) are provided with showers and water-borne sanitation and each has a fenced plot. A piped water supply is available to individual houses (metered at a charge of one shilling and nine pence per 1,000 gallons).

The accommodation is being provided at the rate of 120 family houses per month.

In addition to the 2,373 dwellings, 276 sites have been allocated on which housing of poorer Bantu families, displaced from shack and other areas is taking place on the site and service system.

These families are allotted a site together with a water point and individual water-borne sanitary accommodation. A family is lent a portable type hut to live in while they erect their own.

Hostels for men now provide 2,464 beds and further accommodation is rapidly becoming available.

These hostels are of cottage type and contain a four bed dormitory and a separate living/cooking room. A water closet, shower and laundry facilities are readily accessible.

Shops, schools and recreational facilities have been completed in the occupied section, and, as each additional portion of the township is developed these amenities are developed with it, thus avoiding any undue inconvenience to the residents.

INDIAN HOUSING

INDIAN SHACK SETTLEMENT ON SOUTHERN BOUNDARY OF CITY — SHACKS GENERALLY OF INFERIOR WOOD & IRON CONSTRUCTION WITH PRIMITIVE BASIC AMENITIES : SANITATION, REFUSE DISPOSAL, ETC.

RE-HOUSING IN A MODERN PLANNED TOWNSHIP. DWELLINGS ARE OF SOLID CONSTRUCTION WITH UP-TO-DATE MUNICIPAL SERVICES.... WATERBORNE SANITATION, ETC.

(b) Southern (Umlazi) Housing Scheme: Preliminary planning and survey work has been carried out in respect of the development of a large housing Scheme in the Umlazi Mission Reserve, the City Council acting as the agent of the Bantu Trust. When completed this Scheme will provide for 20,000 families and will form a complement to the kwaMashu Scheme to the North. As this Southern area is outside the City boundaries it is probable that the health control will not be placed on this Department.

(c) Cato Manor Emergency Camp: No change has taken place in this Settlement and the total sites developed still stand at 4,417.

Due to unsettled conditions prevailing it is desirable to rehouse this population in permanent housing schemes as the housing of Bantu people on the site and service principle has not really proved a success in this instance.

Slum (Shack) Distribution and Elimination (Bantu)

The Department of Bantu Administration has continued with its shack clearance programme which it started early in 1958. It is the intention, by gradual demolition of existing shacks in uncontrolled areas (shack settlements existent on private property) to eliminate eventually all such settlements, and to rehouse the occupiers in controlled housing schemes or locations.

No attempt is made to give an accurate figure as the scene is changing daily, but it is estimated that there exist in this City approximately 6,429 Bantu-occupied shacks varying in type from shanties to fairly good dwellings.

Shack Demolition: Removal and Re-housing of Bantu
(By the Department of Bantu Administration)

The following reflects the areas dealt with and completely eliminated up to 31st December, 1959.

Area	No. of Shacks	No. of Families	No. of Persons
Haviland Road	248	855	3,083
Tin Town	108	232	884
Dunbar Road	36	97	335
Mnyama	194	669	2,572
Ezinkaweni	172	471	1,894
Total	758	2,324	8,768

The families found in the shack areas and removed have been catered for as follows:

(a) Those earning £11 per month and over were housed at kwaMashu in permanent housing;
(b) Those earning less than £11 per month were either:
  (i) Accommodated in sub-economic houses at Chesterville Location which became available when tenants in the economic group were given notice to take up accommodation at kwaMashu;
  (ii) Transferred to transit accommodation in the Cato Manor Emergency Camp.

By the end of the year, saturation point had been reached in the Cato Manor Emergency Camp and other venues were being sought.

Since the commencement of the progressive programme of re-housing of the Bantu in Municipal Housing Schemes and in the Cato Manor Emergency Camp, approximately 11,000 persons have been removed from squalid shack settlements and their shacks have been demolished. Many thousands of Bantu remain however in the "Mgangeni", "Mpembini", "Tibela" and "Madhleba" areas at Cato Manor.

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Control of Premises (Slums) in Zoned Areas

There has been steady improvement in most of these areas, particularly in Zones 6 and 7 where up to 90% of the dwellings have been demolished, and new buildings erected in their place.

It is evident that although improvements have been made throughout the remaining zones, considerable rebuilding programmes can only be instituted once the Group Areas demarcations have been decided.

Bantu Housing, Existing Provision: Locations (Family Housing): Summary

	No. of Houses	Population
Baumannville	60	400
Lamont	1,911	13,400
Lamont Extension	798	5,100
Chesterville	1,265	7,900
Umlazi Glebe Native Village	735	4,700
kwaMashu	2,373	13,000
	7,142	44,500

(60 houses in Baumannville have been set aside for the housing of the Native Administration Security Corps thus leaving a balance of 60 dwellings reflected above).

(kwaMashu: In addition to the 2,373 dwellings, 276 sites, some with temporary dwellings have been allocated).

Hostels and Dormitories	Beds
Somtseu Road (Male	7,040
S.J.Smith (Merebank) (Male)	4,272
Dalton Road (Male)	1,662
Jacobs (Male)	788
Bell Street (Male)	Vacated
Ordnance Road (Male)	Vacated
Grey Street (Female)	687
Jacobs (Female)	64
kwaMashu (Male)	2,464
	16,977

Total number of persons housed municipally	61,477
Estimated Bantu population	192,513

Essential information relative to the various locations and hostels is as follows:

Baumannville Location

Completed 1934	Houses 60 (formerly 120)
Water supply	Piped to individual houses
Sanitation	Water closets individual houses
Ablution	Showers individual houses
	Washing gullies individual houses

Lamont Location

Houses completed (Economic)	798
Houses completed letting	1,911
Total	2,709
Water supply	2,709 houses have piped supply
Ablutions	2,709 houses have piped supply
	178 Communal washing gullies
Sanitation	2,709 houses have water closets
Clinic Services	Institute of Family and Community Health, Merebank.

Chesterville Location

Completed 1946	Unchanged
Houses	1,265
Water supply	individual piped
Ablution	Bathroom to each house
Sanitation	Water closet to each house
Clinic Services	Mother and baby clinic weekly - City Health Department. Ante-natal clinic run by McCord Zulu Hospital.

Umlazi Glebe Native Village

Houses	735
Water supply	45 Communal standpipes
Sanitation	2 Aqua privies and individual pit privies

N.B. Chesterville and Baumannville Locations are provided throughout with electrical power as are all hostels and dormitories. Electrical power is available in all other locations/villages but only a few residents have taken advantage of the amenity.

kwaMashu Township

Houses proposed	12,000 (approximately)
Houses completed to date	2,373
Water supply	Individual piped
Sanitation	Water closets
Clinic Services	Daily health clinic services are conducted by the City Health Department.

Building Plans

A total of 3,425 plans, covering the following work were received officially for examination and report by this Department during 1959. Details of the plans examined are set out below:

Type of Structure	No. of Plans	No. of Units	Estimated Cost
New Private Dwellings - 1 and 2 rooms		31	
3 rooms		34	
4 rooms		94	
5 rooms		385	
6 " and over		80	
Total of Dwellings	615	624	£2198,447
Flats - 1 room		315	
2 rooms		359	
3 rooms		214	
4 rooms and over		81	
Total	62	969	£1757,260
Other Residential Buildings	5		148,300
Industrial and Commercial Buildings	55		1332,536
Other New Buildings	24		317,103
New Municipal and Government Buildings	50		1599,854
Additions: to Residential Buildings	1,847		455,910
to non-Residential Buildings	702		706,466
to Municipal Buildings	65		220,808
Total	2,614		1383,184
Grand Total	3,425	1,593	£8736,684

Includes 9 plans for 1,668 - 3 Room kwaMashu dwellings at £415,236
" 2 " " 220 - 3 Room Merebank/Wentworth Dwellings at £115,405
Total 1,888 Total £530,641

* * *